

A SURVEY OF THE OPINIONS OF OFFICE PRACTICE SUPERVISORS AND EMPLOYERS
TO DETERMINE COMPETENCIES OF GRADUATES OF THE HASKELL INSTITUTE
COMMERCIAL DEPARTMENT, CLASSES OF 1957, 1958, AND 1959

by

J. BRUCE LAUGHLIN

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TABLE OF CONTENTS

	Page
TABLE OF CONTENTS	ii
LIST OF TABLES	iv
CHAPTER	
I. INTRODUCTION	1
Nature of the Study	1
Haskell Institute	1
The Commercial Department	5
II. REVIEW OF LITERATURE	6
Generally Related Topics	6
Specifically Related Topics	13
III. PURPOSE OF THE STUDY	24
Overall Purpose	24
Specific Objectives	25
IV. METHODS USED IN THE STUDY	28
Development of the Rating Scales	31
Purpose and Content of the Various Rating Scales	34
Part I: Survey of Office Practice Supervisors	37
Part II: Survey of Employers	43
V. FINDINGS	49
General Information	49
Findings: Part I	50
Findings: Part II	68
VI. CONCLUSIONS AND RECOMMENDATIONS	110
Conclusions: Part I	110
Recommendations: Part I	114
Conclusions: Part II	116
Recommendations: Part II	123
ACKNOWLEDGMENT	127
REFERENCES	128

TABLE OF CONTENTS (concluded)

	Page
APPENDIX A: Memorandum to Commercial Teachers	132
*APPENDIX B: Memorandum to Office Practice Supervisors Complete Set of Rating Scale Forms, Showing Part I Results	134
APPENDIX C: Statement of Purposes and Functions of the Office Practice Program	152
APPENDIX D: Part I Results, Showing Extreme Item Rankings in Each of the Occupational Proficiency Rating Scale Sections	154
APPENDIX E: Cover Letter and Preliminary Questionnaire, Part II . .	178
APPENDIX F: Cover Letter Mailed With Rating Scales, Part II Follow-Up Letter Mailed to Those Who Did Not Respond . .	181
*APPENDIX G: Complete Set of Rating Scale Forms, Showing Part II Results	185
APPENDIX H: Part II Results, Showing All Items Ranked in Each of the Occupational Proficiency Rating Scale Sections	202

(*) Each complete set of rating scales includes the following:

Estimate of Instructional Efficiency
 Instructional Area Time Allotment Evaluation
 Occupational Proficiency Rating Scale Instruction Sheet
 Occupational Proficiency Rating Scales:
 General Characteristics
 Personal Characteristics
 Work Habits
 Typing
 Shorthand and Transcription
 Voice Writing
 Business English
 Bookkeeping and Accounting
 Business Mathematics
 Business Law
 Adding Machines and Calculators
 Duplicating Machines
 Addenda

LIST OF TABLES

Table	Page
1. Part I <u>Occupational Proficiency Rating Scales</u> section-by-section rank order breakdown showing percentage relationships of total "very important" responses to total responses possible.	55
2. Part I <u>Occupational Proficiency Rating Scales</u> section-by-section rank order breakdown showing percentage relationships of total "not important" responses to total responses possible.	57
3. Part I <u>Occupational Proficiency Rating Scales</u> section-by-section rank order breakdown showing percentage relationships of total "performance not known" responses to total responses possible.	58
4. Part I <u>Occupational Proficiency Rating Scales</u> section-by-section rank order breakdown showing percentage relationships of total "above average performance" responses to total responses possible.	61
5. Part I <u>Occupational Proficiency Rating Scales</u> section-by-section rank order breakdown showing percentage relationships of total "above average performance" responses to total responses obtained.	62
6. Part I <u>Occupational Proficiency Rating Scales</u> section-by-section rank order breakdown showing percentage relationships of total "below average performance" responses to total responses possible.	64
7. Part I <u>Occupational Proficiency Rating Scales</u> section-by-section rank order breakdown showing percentage relationships of total "below average performance" responses to total responses obtained.	65
8. Part II <u>Estimate of Instructional Efficiency</u> subject area rank order breakdown showing percentage relationships of total "above average instruction" ratings received compared with total ratings possible, 100.	70
9. Part II <u>Estimate of Instructional Efficiency</u> subject area rank order breakdown showing percentage relationships of total "above average instruction" ratings received compared with total ratings obtained.	71

LIST OF TABLES (continued)

Table	Page
10. Part II <u>Estimate of Instructional Efficiency</u> subject area rank order breakdown showing percentage relationships of total "below average instruction" ratings received compared with total ratings possible, 100.	73
11. Part II <u>Estimate of Instructional Efficiency</u> subject area rank order breakdown showing percentage relationships of total "below average instruction" ratings received compared with total ratings obtained.	74
12. Part II <u>Instructional Area Time Allotment Evaluation</u> rank order breakdown showing percentage of total "too much instruction time" ratings compared with total ratings obtained.	77
13. Part II <u>Instructional Area Time Allotment Evaluation</u> rank order breakdown showing percentage of total "too little instruction time" ratings compared with total ratings obtained.	78
14. Part II <u>Instructional Area Time Allotment Evaluation</u> rank order breakdown based upon comparison of training time excesses with training time shortages, as expressed in employer ratings.	79
15. Part II <u>Occupational Proficiency Rating Scales</u> section-by-section rank order breakdown showing percentage relationships of total "very important" responses to total responses possible.	82
16. Part II <u>Occupational Proficiency Rating Scales</u> section-by-section rank order breakdown showing percentage relationships of total "not important" responses to total responses possible.	84
17. Part II <u>Occupational Proficiency Rating Scales</u> section-by-section rank order breakdown showing percentage relationships of total "performance not known" responses to total responses possible.	86
18. Part II <u>Occupational Proficiency Rating Scales</u> section-by-section rank order breakdown showing percentage relationships of total "above average performance" responses to total responses possible.	87

LIST OF TABLES (concluded)

Table		Page
19.	Part II <u>Occupational Proficiency Rating Scales</u> section-by-section rank order breakdown showing percentage relationships of total "above average performances" responses to total responses obtained.	89
20.	Part II <u>Occupational Proficiency Rating Scales</u> section-by-section rank order breakdown showing percentage relationships of total "below average performance" responses to total responses possible.	90
21.	Part II <u>Occupational Proficiency Rating Scales</u> section-by-section rank order breakdown showing percentage relationships of total "below average performance" responses to total responses obtained.	91

CHAPTER I

INTRODUCTION

This thesis reports the findings of a study conducted to determine competencies of graduates of the Commercial Department at Haskell Institute. The first part of the study was a preliminary survey of fifteen office practice supervisors on the Haskell campus who, through the use of rating scales, evaluated the performance of nineteen office practice trainees. The second and major part of the study was a survey of 91 employers who, by completing rating scale forms, evaluated the performance of one hundred of the 199 Indian youths who were graduated from the Haskell Commercial Department in the years 1957, 1958, and 1959. Throughout this paper the first or preliminary survey has been referred to as Part I of the study, and the major survey has been identified as Part II. These surveys were used to obtain information vital to, and for the purpose of, curriculum improvement.

Haskell Institute, founded in 1884, is a United States Government non-reservation boarding school for Indians operated under the administration of the Bureau of Indian Affairs, Department of the Interior. Haskell is located at Lawrence, Kansas on a campus of more than 450 acres of land. In its Bulletin of Information the institution is described as one having both a functional high school program and a post high school training program, offering instruction in 25 vocations.¹ Haskell is a member of the North Central Association of Colleges and Secondary Schools and is

¹Learn to Earn at Haskell, Bulletin of Information, Haskell Institute, Lawrence, Kansas, 1961, p. 16.

accredited by the Kansas State Department of Education. The school also conforms to the standards set by the Branch of Education of the Bureau of Indian Affairs. The post high school division is not accredited as a junior college, however.

Haskell's motto is "Learn to Earn." The stated purpose of the Haskell program is to prepare young Indian men and women to earn their own livings and to participate in the modern social and economic life of the nation.¹ Specific objectives, not all of which apply to all phases of the training program, include the following: 1. To provide terminal vocational training which will prepare young Indian men and women to earn their own living. 2. To provide pre-professional training which will prepare Indian youth to pursue college training, nurses training, commercial training, or some other type of higher education. 3. To provide a broad general education program which will prepare students to live happy and useful lives in the major culture or in Indian community life. Other stated objectives include: Development of Citizenship; Leadership Training; Preparation for Successful Family Life; and Health and Physical Development.

Haskell annually enrolls approximately 1,000 students, including about 550 in the post high school division. Annual enrollment includes students from approximately eighty tribes in thirty states. In the 1959-1960 school year about half the students enrolled were full-blooded Indians and about one-fifth of the students were approximately three-fourths Indian. The remaining portion of the enrollment was equally divided between one-half degree and one-fourth degree Indian blood.

¹Ibid., p. 14.

The school is coeducational and students are housed in dormitories. All students work on institutional detail for room and board and receive free tuition, books, and supplies. Many boys and girls earn money in town for clothes and other expenses. The Commercial Department, to which this study relates, is the largest department in the post graduate division. The high school offers commercial training, also, but this instruction is totally unrelated to the post graduate Commercial Department. Vocational training programs include: baking, commercial cooking, costume shop, dental assistant, dining room management, dormitory management, home decoration, auto mechanics, carpentry, electricity, machine shop, masonry, painting, plumbing, radio, refrigeration, sheet metal, steam fitting, welding, and printing.

Requirements for admission to Haskell include the following: (1) at least one-fourth degree Indian blood; (2) approval of Agency and Area officials; (3) completion of the previous grade; and (4) place of residence. The commercial course and other post high school courses are open to students from any jurisdiction in the United States which qualifies students for boarding school enrollment. Regular high school enrollment is limited to the following states: Iowa, Kansas, Mississippi, Montana, Nebraska, North Carolina, North Dakota, Oklahoma, South Dakota, Wyoming.¹

The policy of the Bureau of Indian Affairs has been to encourage Indian attendance at local public or parochial schools whenever possible.

¹Ibid., p. 40.

Students who attend high school at Haskell do so because of some home problem, some lack of adjustment, some inability to fit into their local public school or reservation school situations.¹ Many high school students come from broken homes or are orphans. The high school student body, then, is not typical, even of the Indian population. Admission to the post graduate division is not contingent upon some home or background problem as is the case for most high school applicants, however.

Contrary to what one finds in most high schools, class enrollments increase from the ninth grade through the twelfth grade at Haskell since the younger students must have made some attempts to adjust to their local situations before gaining admission.

The staff at Haskell numbers about 150 persons. There is something of a dichotomy in the staff, separating those whose work is primarily educative, including about 60 teachers, and those whose work is secondarily educative, but primarily supportive. Dormitory night attendants are an example of the second group.

The magnitude of the facility may be made more understandable with the presentation of some valuation and expenditure figures: land value was estimated in 1960 to be more than \$41,000; valuation of buildings and plant, not counting buildings under construction, was in excess of \$1,840,000; major equipment was worth more than \$512,000; the projected annual budget for fiscal 1962 was approximately \$1,180,000, including \$865,000 for wages and salaries. Expenditures for food are \$8,000 to \$10,000 per school month.

¹Enola M. Pipes, A Report on the Use of an Inventory in Identifying the Potential Drop-Out in a Federal Boarding School for Indians, Unpublished Master's report, University of Kansas, Lawrence, Kansas, 1958, p. 4.

The Commercial Department at Haskell offers two years of intensive training in the secretarial, stenographic, clerical, and accounting fields. The Commercial training staff includes eight classroom teachers and an administrative head. The administrator also supervises an accounting clerk, who conducts the Haskell Student Bank, providing both regular banking and training services. Each teacher in the Department is regularly certificated by the Kansas State Department of Education. The Commercial Department is housed in a modern, recently-constructed one-story building. The latest in equipment and machines is provided, and audio and visual teaching aids are utilized in most courses. Up-to-date books and materials are available to all students.

One requirement for admission to the Commercial curriculum that has not already been mentioned is that the applicant must attain satisfactory scores on a battery of predictive entrance tests. The battery includes: Otis Quick-Scoring Test of Mental Ability (gamma); Cooperative English Test (single booklet edition, lower level); Cooperative General Achievement Test of Proficiency in Mathematics; Hundred-Problem Arithmetic Test (by Schorling, Clark, and Potter); and the Guilford-Zimmerman Temperament Survey.¹ The testing program is a cooperative project of the Bureau of Indian Affairs and the Guidance Bureau of the University of Kansas.

In recent years the annual enrollment in the Commercial Department has consisted of approximately 200 students, including about 75 seniors. Females outnumber males. For example, in the Class of 1960 there were but 14 boys in a class of 76 students.

¹L. Madison Coombs, Ralph E. Kron, E. Gordon Collister, and Kenneth E. Anderson, The Indian Child Goes to School, United States Department of Interior, Bureau of Indian Affairs, 1958, p. 160.

CHAPTER II

REVIEW OF LITERATURE

There are many reports of school surveys designed for curriculum improvement. Koeninger has prepared a lengthy list of such surveys.¹ However, unlike the present study, most follow-up investigations have sought responses from graduates, not employers of graduates. Historically, follow-up studies have been guided by the following major purposes: studies concerned with youth and their adjustments; studies concerned with the school and the curriculum; and studies concerned with the community.² Studies concerned with the school and the curriculum, in which category the present study belongs, have sought to evaluate the overall effectiveness of the curriculum in the light of: (a) experiences of the school-leavers, (b) objectives of the entire curriculum, (c) purposes and objectives of specific courses and the effectiveness of instruction. They have also sought to evaluate the guidance services in terms of meeting the total life needs of former students; and, to secure more adequate bases for deciding on such changes in the school program as (a) addition of new courses, (b) addition of needed content for existing courses, (c) the elimination of certain units or entire course, (d) changes in sequence

¹Rupert C. Koeninger, Follow-Up Studies, A Comprehensive Bibliography, State Board of Education, Secondary Curriculum Study, Lansing, Michigan, 1942, p. 1.

²Follow-Up of Secondary School Students, "Leads to Better Secondary Schools in Michigan", Michigan State Board of Education, Lansing, 1943, p. 10.

of courses to adjust to the vocational and psychological needs of the students, and (3) changes in the guidance program. A fourth set of objectives has been: to provide for faculty growth through (a) increased knowledge of student adjustment problems, and (b) information on the degree to which school work is geared to life problems.

Many such surveys have been more or less subjective. Most of them were found to relate to quantity, not quality, of training; the survey by Chapman was an example of this type.¹ Many surveys merely have asked graduates what they were doing, and where they were doing it.²

There have been many reports as to what the business school curriculum should include, but there has been little evidence that the planning has made much application of the stated requirements of employers or, for that matter, whether such requirements have often been stated or sought, at least for lower echelon clerical jobs.

Several possible reasons for the scarcity of studies of the type reported in this paper have been given by Gunders:³

First, the emphasis placed on control of industrial labor by the industrial engineer has not been matched by the office manager or the accountant, with respect to clerical work. Second, there has been an understandable reluctance on the part of management to attempt the use of the stop watch in offices. It is often feared that such a procedure may increase the speed of the trend toward white-collar unionization. Finally, a much broader amount of variation in productivity is possible in the performance of mental or partially mental tasks than is the case with purely physical tasks.

¹Carolyn E. Chapman, "Secretaries for Doctors," Journal of Business Education, May 1958, 33(8):323-324.

²Follow-Up Report of the 1956 Graduates, Unpublished report, Kansas State Teachers College, Pittsburg, Kansas.

³Henry Gunders, "Clerical Work Measurement, Part I," Journal of Business Education, Nov. 1958, 34(2):87-89.

Bell and Sickelbower, like Gunders, have written that the difficulty of clerical work measurement does not detract from the need for attempting such measurement:¹

The attention which has been given to work measurement both in the classroom and in business indicates that standards of the office cannot easily be studied and observed in an exact way. Office production is more difficult to measure than factory output because units of measurement vary, and measurement based upon the relationships between people and machines is complicated and involved.

Students must be helped to understand that there is an effort to measure objectively the work of office employees but that complete objectivity is often impossible.

Although most office tasks cannot be measured with complete objectivity, many do lend themselves to some form of exact measurement. Business has not yet learned to measure the subjective elements by a uniform quantitative method. On the other hand, those aspects of office production which are most closely connected with the human element can be measured with some degree of exactness.

Work habits, co-operation, and personal traits of many kinds are attributes of the employee which the firm measures, but only in rating scales has any attempt been made to measure traits in uniform ways.²

The above paragraphs have, it is thought, made a good case for the purposes and methods used in the present study.

Even when the opinions of employers have been obtained, they have quite commonly taken the form of general, not specific, criticism of business education. Also, evaluations by businessmen have more often been with reference to college and university schools of business than

¹Mary L. Bell and Russell Sickelbower, "Students Learn About Standards Through Office Visits," Business Education Forum, April 1958, 12(7):28-29, p. 28.

²Ibid., p. 29.

to commercial schools at the immediate post high school level. A typical example of such evaluations may be seen in the study titled Business Looks at Business Education.¹ Investigations of this type are rather unstructured and call for general impressions.

The writer was unable to locate a study precisely parallel with the current investigation. There may have been a few evaluations based upon attitudes toward clerical workers in general, but no comprehensive reports showing employer identification of specific employee competencies, for the purpose of curriculum improvement, have been located.

Himstreet, in questioning the validity and usefulness of research projects being conducted has challenged the value of "library research" and has advocated more experimental research projects; he has made sharp comments directed at much recent research, and possibly at the kind of study reported in this paper.²

The similarity of findings in community business surveys and follow-up studies of graduates, to cite only two examples, indicates there is much duplication of effort. Are the requirements for business jobs in Portland, Maine, different from those for business jobs in Portland, Oregon? Are the training requirements for a secretary in one city different than in the other? No! The business educator might ask himself, disregarding the public relations value of the business survey, "Haven't we asked the businessman all too often what we should teach?" The teacher, not the businessman, is the real expert in curriculum development, and there should be some doubt about the businessman's ability to serve as a curriculum specialist.

¹Business Looks at Business Education, A Study Sponsored by: School of Business Administration, University of North Carolina, Chapel Hill, 1958, 30 pp.

²William C. Himstreet, "Analysis and Criticism of Research in Business Education, 1952-1956," The Balance Sheet, Dec. 1958, 40(4):148-150, p. 149.

It should be pointed out, however, that most such surveys have been local in nature and not well publicized, have been conducted from schools possibly more "typical" than Haskell Institute; also, that no survey similar to this has been found where employers of Indian youth were asked specific questions about specific skills. It would also be added that the form of this study is such that employers do not have to serve as curriculum specialists. Rather, the employers are the providers of factual opinions to be utilized by trained staff members for purposes of curriculum improvement.

Thomas has been less critical of surveys to determine employer opinion than was Himstreet:¹

What value or advantages might be derived from a community survey of office standards? In the first place, as a result of the findings, business teachers should have a better perspective of office standards as interpreted by those employers cooperating in the community survey. This is especially helpful if those same employers frequently hire the school's graduates. Secondly, it could provide the basis for possible curriculum or course of study revisions. Changes in standards or teaching methods might well become an outgrowth of such a survey. In the third place, the business teachers can use the findings as a motivating device in the classroom by pointing out to students the standards they may expect to find in the employing business offices.

It should be pointed out that the "community" of employers, so far as Haskell is concerned, is the entire nation. Students come from all parts of the country, and become widely scattered after graduation. It should also be mentioned that some employers hire graduates each year; this is especially true of some large government offices in Washington, D. C. which annually request the services of several graduates.

¹Ralf J. Thomas, "Determining Office Standards Through a Community Survey," Business Education Forum, Oct. 1957, 12(1), p. 30.

McGill has also pointed up the need for curriculum research, business curriculum planning, and re-evaluation:¹

Every educational organization needs to know what happens to its graduates—where they are, what they are doing, and what educational preparation is important for the work they are doing and for handling their personal business affairs.

Crank and Crank, in defining a number of imperatives in the business curriculum, have made a number of pertinent remarks:²

First of all, it must be recognized that the curriculum is a means to an end, not an end in itself.

The business education curriculum must be strongly vocational in nature and must include the minimum essentials for job training.

These minimum essentials will include: An area of job skills; the development of personal qualities; and sufficient occupational intelligence to permit successful initial performance and advancement on the job.

Students need more than one specific skill; they need an area of skills.

The business education curriculum must be a cooperative venture, enlisting the aid of school officials, businessmen, parents, and former students.

A major implication of this . . . is that continuous surveys of the employment community serve as bases for curriculum development and improvement.

Changing emphases in education may necessitate the realignment and restructuring of curricular experiences in business education.

¹E. C. McGill, "A Look at the Business Curriculum," Business Education Forum, Jan. 1960, 14(4), p. 7.

²Doris H. Crank and Floyd L. Crank, "Imperatives in Planning the Secondary School Business Education Curriculum," The Balance Sheet, April 1959, 40(8), p. 243.

Timmons has enumerated a number of traits and abilities which the personnel director looks for in hiring stenographers and secretaries.¹ In similar vein, Kyle listed a number of common deficiencies found in beginning stenographers, suggesting deficiencies in training offered.²

By way of further justifying the present study, the writer notes that Kyle also pointed out that "the school situation is different than the work situation."³ Identification and resolution of these differences are prime objectives of this study.

As reported in the Encyclopedia of Educational Research, "Numerous studies have been conducted in which recommendations have been made that have implications as to the quality and effectiveness of business education programs."⁴ The same source adds, at a different place, that most curriculum studies have related to individual needs and individual differences.⁵ It has been the hope of the writer that the present study might help individuals to meet their own needs by helping them, beforehand, to meet their future employers' needs.

¹Ellen R. Timmons, "The Personnel Director Selects the Stenographer," Business Education Forum, Oct. 1959, 14(1), p. 14.

²Ceraldine Kyle, "The Stenographic Supervisor Evaluates Business Beginners," Business Education Forum, Oct. 1959, 14(1), p. 10.

³Ibid., p. 12.

⁴Chester W. Harris, editor, Encyclopedia of Educational Research, New York: The MacMillan Company, 1960, p. 180.

⁵Ibid., p. 360.

The importance of the continual questioning by business educators as to the needs of business is suggested by the inclusion in each issue of the Business Education Forum of a section called "Office Standards and Cooperation with Business."

The review of literature in this chapter has so far been in quite general terms, relating to business curricula, purposes, and methods. It would seem well at this point to turn to writings much more closely allied with the subject of this study. More specifically, this will involve referral to surveys aimed at improvement of the business curriculum and papers written concerning Haskell Institute.

The members of commercial departments in a number of schools have been interested in the vocational placements and adjustments made by their graduates and have used the follow-up to serve this purpose. This type of follow-up differs from many others in that it is limited to a selected group of graduates completing work in the commercial department. A study of this type was made of the commercial graduates of Roosevelt High School in Wyandotte, Michigan. In this investigation, a questionnaire was developed to secure information as to (1) successes, failures, and adjustments of former students, (2) relationships between the work required on the job and the training received in school, and (3) need for further training before securing a position. The findings of this study resulted in significant changes in instruction in the commercial department.¹ The study by Hoffmann, reported later, was similar to the study just mentioned, and was pertinent to this writer's study, in spite of important differences.

¹Wanda Walker, A Follow-Up Study of the Commercial Girl Graduates of the Theodore Roosevelt High School of Wyandotte, Michigan, for the Years of 1930-1939, Inclusive, Unpublished Master's thesis, University of Michigan, 1941.

Two recent surveys, both relating to medical secretaries, which are of considerable relevance have been reported. One was the report of a survey by Los Angeles City College to find out what qualities doctors look for in their secretaries.¹ The other reported a survey of graduates of a junior college medical-secretary curriculum, to determine what areas of training are used, and the relative importance, time-wise, of each.²

The Holdridge survey involved a check list of 16 structured and six optional items; these were mailed to 450 members of the Los Angeles County medical association. The response group was selected from specialists who would have staffs large enough to include medical secretaries. Through this survey the school sought to determine whether they were meeting the needs of their students. The questionnaire asked doctors to check the duties of their secretaries and assistants. The answers received revealed relative emphases, time-wise, to be spent on manual shorthand and transcribing machine use. The school concluded they should give equal emphasis to voice-writing and shorthand, that they should include skills most frequently mentioned in the questionnaire returns, and that laboratory tests should be included in the training.

Holdridge continued:

This questionnaire survey has pointed the way for us to continue to build our medical secretarial curriculum on solid ground. Any terminal vocational course must serve prospective

¹Thelma E. Holdridge, "We Evaluated Our Medical Secretarial Course," Business Education World, Nov. 1959, 40(3), p. 22.

²Carolyn E. Chapman, "Secretaries for Doctors," Journal of Business Education, May 1958, 33(8), p. 323.

employers as faithfully as it serves students in training for today's job requirements. Only a periodic check of on-the-job tasks will give assurance that the instruction is meeting today's demands and not just those of the not-so-new textbook. We plan to send mailings of a similar questionnaire every two or three years to keep our course in line with changing conditions. This will also, of course, serve the purpose of further publicizing our program among doctors in our area.

Of the 450 questionnaires mailed in the Holdridge study, 208 replies were received--a 46 per cent return.

The immediate objective of the survey reported by Chapman was to evaluate the curriculum of a junior college as to coverage and intensity, to find out from graduates working as medical secretaries whether they thought the school was properly and adequately utilizing the time and resources available to it.¹ Chapman stated:

Most colleges keep in fairly close touch with their graduates through alumnae associations and placement bureaus, and evaluations of the adequacies of training frequently come to light through letters from graduates. But there eventually comes a time when schools make a deliberate and systematic effort to contact their graduates through a planned survey questionnaire.

One hundred and six questionnaires were mailed; 88, or 83 per cent, were answered and returned; 17, or 20 per cent of those answering, were not working as medical secretaries. (The writer notes that the percentage not working among those not answering would be considerably higher.)

Several conclusions were reached: shorthand was still considered important, as were medical terminology, bookkeeping, office procedure, and typing. Information was also obtained as to the kinds of medical services

¹Op. cit.

being expected of and rendered by the secretaries. Through the survey the school was reassured that its course in psychology was very useful.

One claimed result was that a course in Red Cross First Aid would be required of all future students. Another suggestion, based on the survey, was that the medical secretary course should be expanded to three years. In addition, Chapman stated:¹

Our survey taught us many things heretofore suspected but now statistically substantiated. The curriculum changes resulting from the survey are twofold; first, an additional meeting each week has been added to the one-semester course in medical secretarial practice. Second, for the first time, the medical secretarial students have been segregated in their science work and are spending the full year on laboratory procedures for the medical secretary.

No attempt was made in this present survey to determine desirable personality traits of medically trained secretaries. That field has been covered quite extensively many, many times. Every one of us in the field of business education needs but a moment's time to list the qualities of dependability, accuracy, tact, sense of responsibility, appearance—qualities to which any employer, regardless of profession or industry readily subscribes.

The present study has not been particularly concerned with the identification of relative importance of items named in the preceding paragraph. However, because of the probable importance mentioned by Chapman, this study has been concerned about the performance of Haskell commercial graduates in the areas listed.

Several significant papers have been prepared in recent years concerned with the curricula of Haskell Institute. The most notable of these was a

¹Op. cit., p. 324.

doctoral thesis prepared by Solon G. Ayers, long-time superintendent of the institution. The primary purpose of the Ayers study was to investigate the Haskell terminal vocational education in terms of federal Indian education policy, student demand for terminal vocational training, and placement and employment record of terminal vocational graduates.¹

Ayers conducted three surveys in order to obtain information for his investigation. The first two surveys are not pertinent to the present topic, but the final and most important phase of the evaluation process was a follow-up survey of Haskell graduates which was conducted early in 1952, and is pertinent to the present study. In this survey a questionnaire containing fifty-two items was sent to 2,246 graduates and 37 per cent responded. Information obtained by the survey was used to evaluate the effectiveness of the Haskell vocational program.

The Ayers paper devoted considerable space to the commercial department because "it is the only exclusively post high school department at Haskell."² It was also pointed out that, "Since Haskell has the only commercial department in the Indian Service, the department accepts students from every state in the Union . . ."³

The success of the commercial training program was exemplified through the listing of more than fifty commercial graduates, with thumbnail descriptions of their notable achievements or positions.

¹Solon G. Ayers, An Investigation of Terminal Vocational Education at Haskell Institute, Unpublished Doctoral thesis, University of Kansas, 1952.

²Ibid., p. 91.

³Ibid.

At page 92 Ayers states:¹

The result of this intensified training is to prepare students for positions much sooner than would be possible under other conditions. Most of the graduates of the commercial department enter government service as clerks or stenographers at a current entrance salary (1952) of \$2,950 per annum. Other commercial graduates secure employment in private business offices at comparable salaries. . . . the placement and employment records of Haskell commercial graduates have been exceptionally high during the past ten years.

The degree to which Haskell is implementing federal Indian education policy in all areas investigated was reported: especially, assimilation into the major culture. "Haskell has not been able to meet the employment demand since 1940, and 27 per cent of the commercial graduates have gone out on jobs before graduation."² (This points up a defect in the training time definitions used in the present study, so far as some graduates are concerned.)

Pipes listed the criteria for high school enrollment as follows:³

1. at least one-fourth Indian blood
2. approval of application by agency or area office. Usually approved if:
 - a. The boy or girl is a whole or partial orphan, with no one in the home to care for the child.
 - b. Illness in the home.
 - c. Parents are divorced and no adequate home is maintained.
 - d. Home is broken because one or more parents are in jail.
 - e. There is chronic alcoholism in the home.
 - f. Home is remote from public school.
 - g. Boy or girl desires specific vocational training.
 - h. There are delinquent tendencies on part of child.
3. Eighth grade graduate.
4. Place of residence--High school enrollment is limited to certain states that do not have government contracts with public schools.

¹ Ibid., p. 92.

² Ibid., p. 188.

³ Pipes, op. cit., p. 4.

In view of the criteria for admission to Haskell, Pipes concluded that "the students come from low income homes where the parents or guardians, if working, are usually engaged in laboring and clerical occupations."¹ The reason for the inappropriateness, and ineffectiveness, of many scale items was thought to be obvious.

Whereas the Pipes investigation concerned Haskell high school students who dropped out before graduation, the present study has been concerned with commercial post graduate students who did graduate.

Other studies have dealt with testing programs at Haskell. At least two have dealt with testing in the Commercial Department. In 1952 Ferguson conducted a study which showed that students who were accepted for training were not statistically different from the students who successfully completed the first year's training, and concluded that factors other than those measured seem to determine whether a student will complete his training once he has been selected.²

In 1954 Baker and Hoffmann reported an investigation made to determine whether the Guilford-Zimmerman Temperament Survey profile would change after two years' time and after certain specific things had happened, including (1) living in a dormitory; (2) being given guidance training; (3) being interviewed and shown one's own profile; (4) receiving a series

¹Ibid., p. 7.

²William A. Ferguson, An Analysis of the Test Scores of Applicants to the Commercial Program at Haskell Indian Institute, Unpublished Master's report, University of Kansas, Lawrence, Kansas, 1952, p. 20.

of dictation articles in advanced shorthand classes which were related to the Personal Relations trait of the Temperament survey. The writers found that there were many changes in individuals' profiles, some positive and some negative, but did not account for the changes.¹

Prompted, in part at least, by the results of Ayers' survey which showed a high percentage of Haskell graduates were engaged in off-reservation employment, and "believing that a great majority of students will establish homes in cities or non-Indian communities where their homes will be apartments or housing far different from that on the reservation," Gray made a study which was "concerned with the teaching of the preparation of food to meet the needs of the young Indian homemaker in this new environment."²

Gray's study was parallel with the present study in that (1) it was a study conducted at Haskell Institute; (2) it was designed to improve the Haskell curriculum; (3) it involved two questionnaires.

One of Gray's questionnaires was designed for new students at Haskell (63 participated) and the other was designed to give some insight into the needs of homemakers in the environment in which the girls would live and the type of training they would need. Both instruments pertained to foods commonly prepared, and utensils and equipment which was used, needed, or wanted. The second questionnaire was mailed to 82 former students, and the results were tabulated when 50 returns were received.

¹Louise L. Baker and Selma Hoffmann, A Report of a Study in Changing Temperament Traits as Measured by a Test and Re-test on the Guilford-Zimmerman Temperament Survey, Unpublished report, Haskell Institute, 1954, p. 2.

²Wanda W. Gray, Some Suggestions for the Improvement in the Scope of the Courses in Foods at Haskell Institute, Unpublished Master's thesis, University of Kansas, 1957, p. 6.

After evaluating the then present food course and a study of the findings of the surveys, Gray concluded that the curriculum could be and should be improved. She made eight recommendations for improvement of the scope of the foods course.

Another quite recent investigation concerning the Commercial Department at Haskell is directly in line with the present one. Hoffmann, in a 1956 follow-up study of the graduates of the Haskell Commercial Department from the Classes of 1953, 1954, and 1955, attempted to determine the kind of work the commercial graduates were doing, for whom they were working, and whether or not commercial training had been helpful to them.¹ The questionnaire used asked twelve questions, the answers to which were evaluated to learn: 1. the kinds of jobs or occupations the graduates entered; 2. who employs the graduates; 3. what are the starting and the present salaries; 4. whether the graduates stayed in the locality of original employment or moved about; 5. whether the training measured up to job requirements in the opinion of the graduates. There were 167 graduates in the three classes, of whom 119, or 71 per cent, participated in the survey. Hoffmann found that 54 per cent of the respondents to the questionnaire were employed in stenographic positions, and 13 per cent were typists. Even though only ten per cent of the respondents were in positions calling primarily for bookkeeping-accounting skills, she concluded that the training offered in the Commercial Department was appropriate and should be continued, essentially as it was.

¹Selma M. Hoffmann, A Follow-Up Study of the Graduates of the Haskell Commercial Department from Classes, 1955, 1954, and 1953, Unpublished Master's report, University of Kansas, 1956, p. 30.

With reference to the scope of the curriculum Hoffmann stated:¹

Almost every respondent thinks that students should continue to be required to take the complete course which includes both stenography and accounting, rather than choose to specialize in one field or the other. Experience on the job has shown them, they say, that a knowledge of both fields and sound training in each of them gives students a wider opportunity for selection of kinds of positions and permits them to apply to fill vacancies in any of the office fields when better paying positions become available. Several of the respondents experienced reduction-in-force actions and they said they were able to take jobs in departments where there were vacancies, regardless of whether those jobs were in stenography or accounting.

Upon learning that much of the work done by graduates who entered the accounting field was concerned with cost accounting, Hoffmann suggested that consideration might be given to incorporation of some work in cost accounting as a part of the regular accounting course.

Hoffmann's investigation was similar to the present study in that it was aimed at evaluation of the curriculum of the Haskell Commercial Department. Also, it related to recent graduates of the department. As in the present investigation, it sought information relating to non-skill training as well as to subject matter. Unlike the present study, however, the Hoffmann questionnaire was a follow-up study with the graduates themselves as respondents. Also, the questionnaire was presented in question form, seeking answers which might be either objective or subjective.

Results of the Hoffmann study showed that 58 per cent of the respondents worked for the Federal Government, and that of this group, 86 per cent were employed in the Bureau of Indian Affairs. The report

¹Ibid., p. 25.

also showed that respondents felt that living in a dormitory helped them to learn to live with all kinds of personalities. Relatively few of the respondents were reported to have answered the question on the opportunity of developing social skills while in school.

CHAPTER III

PURPOSE OF THE STUDY

As indicated in the Introduction, the study has been divided into two parts, Part I based upon a survey of office practice supervisors and Part II based upon a survey of employers of recent graduates. In both parts of the study an attempt was made to learn the degree to which students and employees and, hence, the Commercial Department, have rendered satisfaction.

The overall purpose of the study was to obtain opinions from office practice supervisors as to the qualifications of their student-trainees, and, similarly, to obtain opinions from employers about the competencies of their graduate employees. Consistent with the prime purpose were the following closely related purposes: to obtain opinions from office practice supervisors as to the relative importance of a large number of skills, traits, and characteristics to the satisfactory performance of their office practice trainees' jobs; to obtain opinions from employers as to the relative importance of a large number of skills, traits, and characteristics to the satisfactory performance of jobs held by recent Haskell graduates; to obtain opinions from office practice supervisors and employers as to the probable quality of instruction given Haskell commercial students in each of the various subject areas, based upon known performance levels, estimated native capacity, and time spent in training; to obtain opinions from office practice supervisors and employers as to the appropriateness of time spent in training in each of the subject areas, based upon knowledge

of job requirements, knowledge of time spent in training, and knowledge of probable course content in each area.

Although the respondents were not asked to evaluate the curriculum per se, it was the purpose of both surveys to obtain rating scale responses which could later be evaluated in order to learn: (1) how well satisfied supervisors are with the competencies of their graduate-employees; (2) in which subject areas students and graduates are weak; (3) in which particular areas of each subject students and graduates are weak; (4) whether the weaknesses can be attributed to poor or inadequate training; (5) whether deficiencies might be overcome through alteration of the training program; (6) in which subject areas too little, or too much, time is spent in training; (7) in which subject areas instruction apparently has been deficient; (8) the nature and extent of non-business deficiencies of students and graduates, and how these might be overcome; (9) whether or not graduates are sufficiently well trained that they might anticipate regular promotions.

The rationale of the purposes and methods used in this study can be expressed, perhaps, by reference to a quotation from Education for Cultural Change:¹

Ideally, we should start with a behavior inventory and work toward modified behavior as a goal, using instruments of evaluation to discover, not whether pupils have done this work, but what the work had (sic) done to these pupils.

The writer's purpose here has been to determine, based upon supervisor

¹Willard W. Beatty, Education for Cultural Change, U. S. Department of the Interior, Bureau of Indian Affairs, Chilocco, Oklahoma, 1953, p. 511.

ratings of the extent to which employees have "done this work," what our curriculum "has done to these pupils," and, more importantly, what the writer and his colleagues can and should better do for pupils in the future. By learning what the students have done and not done for their employers, the staff can learn what it has done and not done for the students.

Since the purpose of the study was evaluation of curriculum, the inseparability of curriculum and evaluation should be emphasized. The source previously cited includes a summary of the purposes of evaluation which seems particularly pertinent to this study:¹

1. To validate the hypothesis upon which the school operates--in other words, the curriculum.
2. To provide a periodic check of the effectiveness of the school and serve as an indicator of points of improvement.
3. To provide a basis for the guidance of individual pupils.
4. To provide for the psychological security of the staff by giving them the confidence which arises from the sure knowledge of the results of their instruction.
5. To provide a sound basis for public relations by giving employees objective data by which they can interpret and justify the school's program.

The list of purposes of evaluation given above was originally prepared with reference to individual testing but, it is felt, has obvious and equal application to the present study.

Major purposes of both surveys used in this study are more fully presented in the following: The Memorandum to Commercial Teachers Dated December 10, 1959 is shown in Appendix A; The Memorandum to Office Practice

¹Ibid., p. 512.

Supervisors Dated January 7, 1960 is included in Appendix B; the cover letter which was mailed to employers in June, 1960 in accompaniment with the various rating scales appears in Appendix F.

Originally, the primary purpose of Part I was simply to improve the materials and procedures to be used in Part II. As will be pointed out later, however, the results obtained were so significant that the first purpose became secondary.

CHAPTER IV

METHODS USED IN THE STUDY

The writer has long been interested in the curriculum of the Commercial Department and in its impact upon individual students. As an instructor in the Department, he is concerned with the occupational success of students and graduates and therefore concerned with the need for curriculum evaluation, and re-evaluation. It has been felt that individual students or graduates may not necessarily be the best judges of the educative experiences to which they have been exposed, even though follow-up studies are legion, and even though it may be relatively easy to obtain opinions from graduates concerning the training they have received. It has been the writer's belief that graduates of schools feel a certain loyalty that compels them to give "expected" responses to questions posed by their former instructors. If this is also true of employers, then it has been felt that at least the bias would be less intense.

Graduates work for employers, and employers are either satisfied or dissatisfied with their employees' work. As McGill has said, "Business recognizes that work is either usable or not usable."¹ Of course, there are degrees of satisfaction along the satisfaction-dissatisfaction continuum. An employee who is satisfied with his own performance may work for an employer who is not. Conversely, a worker who is afraid that he is not adequately coping with his job may find that his employer is well

¹McGill, op. cit., p. 6.

satisfied with his performance. If employers have been unhappy with the competencies of Haskell graduates, Haskell should seek to determine the fact and should endeavor to take corrective action. It was thought that if employers would only express themselves, they could reveal the effectiveness of the training offered, especially since it is vocational in nature.

In an effort to bridge the gap between business education and business, and in the hope that the Haskell Commercial curriculum might be improved, the writer determined to obtain an evaluation by employers of the training offered. Initial planning for the achievement of this objective was begun in October, 1959.

Major steps in the study included the following: (1) development of rating scale forms; (2) obtaining staff assistance in listing items to be covered by the scales; (3) developing rating scale memoranda and instructions; (4) preliminary survey of office practice supervisors, constituting the "trial run"; (5) analyzing and interpreting results of the preliminary survey; (6) preparation of a major survey mailing list; (7) preparation and mailing of a preliminary questionnaire designed to verify employee locations and supervisor identities to eliminate waste in initial rating scale mailings; (8) preparation of the cover letter and mailing of rating scale forms to responding employers; (9) preparation and mailing of follow-ups to both preliminary questionnaires and rating scales; (10) processing of completed rating scales returned, and preparation of a comprehensive paper to make known the results.

Reasons for Deciding on the Use of Rating Scales. It was thought that employers should not be asked direct, subjective questions concerning

the curriculum, for that would require interpretative skills concerning this curriculum which employers might not have, and would also involve the probable risk of distortion in communication. One author has earlier been cited as cautioning the educator as to businessmen's ability to serve as curriculum specialists.¹

Perhaps influenced by evaluative systems observed in many years as a student and in eight years as a teacher, the writer leaned toward the use of rating scales for evaluation rather than toward other media. It was felt that most people are conversant with three-point (good, average, bad) and five-point (A, B, C, D, F) rating scales. Consciously or unconsciously, rating along these lines is done by every person every day. This entire project, then, involved an attempt to "quantify qualities."

An advantage of the rating scale is the forced selection from among defined categories, permitting the reduction of results into comprehensible units. Objective quantification of subjective behavior, though only approximate and susceptible to error, seems at least as reasonable as a variety of subjective expressions concerning subjective behavior. The danger of overconfidence in rating scales can be ameliorated somewhat through constant self-reminding that what seems "good" in the mind of one respondent may be only "average" in the eyes of another.

The use of structured rating scales has the advantage of assurance that a certain ground will be covered. Inclusion of "not important," "not known," and "comments" columns was thought necessary, however, to

¹Hinestreet, *op. cit.*, p. 149.

assure that respondents would not be forced to give misleading answers, the usual result when the range of rating scale options is too narrow.

Development of the Rating Scales

Since the writer desired to make the survey a comprehensive one, it was decided that not just a single scale, but a series of rating scales would be necessary. A comprehensive survey was desired because: (1) anything less would offer no assurance that the greatest curricular weaknesses would be detected; (2) by evaluating the entire curriculum, part by part, each area might be brought into proper perspective against the whole. These reasons were thought to override the objections that the bulk of an intensive and extensive study would discourage a satisfactorily large response.

In general, five-point scales were thought to be best since they were categorized sufficiently to be discriminatory, consistent with a common range of human evaluation, familiar to most persons who have ever attended school, yet not so compartmentalized as to be discouraging or bewildering to a rater.

One very important kind of information desired was related to the quality of instruction given in each subject area. Another purpose was to determine whether the time spent in training in each skill or subject area is appropriate. To the extent that a boarding school does, or could, influence them, the general characteristics of students were considered important enough to be investigated. Most employere and supervisors are conscious of the personal characteristics and the work habits of their

trainees and employees. Since these factors may affect employee success and since they can be influenced in school life, they were also considered proper subjects of an inquiry directed toward curriculum improvement. The most obvious areas of investigation, of course, would be employee performance in each subject area of the curriculum. It was thought necessary to develop rating scales to answer questions in each of the areas mentioned in this paragraph.

Estimate of Instructional Efficiency. Teachers vary in the quality of their performance. One group of students may profit more from the training of one instructor than from that of another. In an attempt to provide each teacher with some employer-based information as to his or her effectiveness, the writer developed the Estimate of Instructional Efficiency which appears in Appendix B.

To the extent that the assumptions made in the Instructions for the scale are correct, reasonably valid results may be expected. In any event, the scale gives the employer a direct opportunity to express his opinions concerning the quality of instruction.

Instructional Area Time Allotment Evaluation. If the quality of instruction in each subject is important, the amount of time spent in training in each skill area has similar significance. The Instructional Area Time Allotment Evaluation was constructed to find out whether employers believe too much or too little time is spent in each subject. This rating scale is also included in Appendix B.

In the Instructional Area Time Allotment Evaluation forms the time spent in training is expressed in terms of total work days and hours, rather than in terms of number of school weeks or units of school credit.

It was hoped that the conversion from school time would facilitate evaluation by business people in terms of the amount of time they themselves spend on the job.

One possible defect in this rating scale would be the tendency for raters to think in terms of clerical jobs in general, rather than confining the basis for evaluation to the rated employee's particular job, as was requested. The statement of time spent in training is incorrect for those graduates who were permitted to leave school a few weeks early in order to accept jobs prior to commencement.

Occupational Proficiency Rating Scales. One vital purpose of the study was to determine how capably Haskell Commercial graduates function on the job in work related to each of the several subject areas. It was necessary to develop a vehicle for obtaining this information from employer opinion.

After a tentative rating scale format was drawn up, the writer desired to obtain needed information and suggestions from the various members of the Commercial staff as to what topics or items should be included in the subject rating scales. The Memorandum to Commercial Teachers seen in Appendix A was used to acquire this help. Each of nine staff members was provided the memo and suggestion forms. While the responses were not voluminous, they seemed pertinent and useful. Nearly every teacher-suggested item was included somewhere in the final draft of rating scales found in Appendix B.

Purpose and Content of the Various Rating Scales

General Summary. The purpose of the Instructional Efficiency Rating Scale was to determine what supervisors or employers think of the quality of instruction in each of the several subject areas which was received by their Haskell-trained employees. The scale is predicated on the following assumptions: (1) the rater, through close daily contact, has knowledge of the intelligence and aptitudes of the employee; (2) the rater has knowledge of the performance or production level in each subject area by each rated employee. Since information as to the time spent in training for each subject area was provided in the rating scale, it was thought that the rater could estimate the probable quality of instruction in each training area as being outstanding, very good, average or satisfactory, barely satisfactory, not satisfactory, or not estimable.

The purpose of the Instructional Area Time Allotment Evaluation rating scale was to determine what supervisors or employers think of the amount of training time spent in each of several subject areas; that is, whether the hours spent in learning each skill area were wasted and not required on the job, more than needed for the job, about right for the job, less than needed on the job, or far too little for the job. This scale is predicated on the assumptions that: (1) the native ability of the employee is known by the rater; (2) the rater has knowledge of the performance or production level in each subject area by the rated employee; (3) the content of the various subjects as taught at Haskell, and elsewhere, is generally understood by the rater; (4) the amount of time it takes to master a clerical skill area is reasonably estimable by the rater. As in the

Instructional Efficiency Scale, the time spent in training for each course is clearly indicated in the rating scale.

In both the Instructional Efficiency and Time Allotment rating scales the following courses, subjects, or instructional areas were listed for evaluation: Typing; Shorthand and Transcription; Business English; Bookkeeping and Accounting; Business Mathematics; Business Law; Adding Machines and Calculators; Duplicating Machines; Voice Writing Machines; and Office Practice. These subjects constitute the two-year course of study offered in the Commercial Department at Haskell. All listed courses are required of every student; there are no electives. Shorthand and Transcription are taught as separate courses in the first and second years, respectively, but they were combined in the rating scales. Similarly, Bookkeeping and Accounting, really separate courses, have been combined for purposes of evaluation.

Some students who do poorly in their first year of work are permitted to repeat the year's work, thus undergoing three years of training before graduation. Some senior students who have difficulty in a particular course, for example, Shorthand, are permitted to drop it and continue with other courses; such students, however, do not receive diplomas at graduation.

While the Instructional Efficiency and Time Allotment scales are concerned with quality of instruction and length of training periods, respectively, the more comprehensive third type of form--the Occupational Proficiency Rating Scale--deals directly with supervisor-employer opinions of the rated employee. There are Occupational Proficiency Rating Scales for each of the ten subject areas included in the Instructional Efficiency and Time Allotment Rating Scales with the exception of Office Practice.

In addition to the nine rated areas common to all three rating scale forms, the Occupational Proficiency Rating Scales include the following: General Characteristics, Personal Characteristics, and Work Habits.

A primary purpose of the Occupational Proficiency Rating Scales is to identify proficiency, or lack thereof, in each subject area. This has necessitated a rather minute breakdown of skills or characteristics for evaluation. Acquisition of the knowledge that many graduates are regarded as relatively unsatisfactory in a subject such as Typing may be useful information, but it is hardly the basis for corrective action to assure greater competence in future graduate-employee. It is not enough to know a general area of deficiency; specific weaknesses in each area must be identified. Knowledge that a frequent graduate deficiency is, specifically, in the typing of numbers, or in the failure to proofread accurately, is a definite guide toward improvement of training. Knowledge of general strength or weakness is interesting, but relatively sterile so far as improvement of curriculum is concerned. Careful itemization of traits and skills has seemed to be the reasonable approach, since in this way corrective action could be properly localized.

Another purpose of the Occupational Proficiency Rating Scales was to determine general and personal characteristics, and work habits of graduates as viewed by supervisors and employers. The assumption was that the listed "non-skill" items are highly important to occupational success. This assumption was not always borne out by the study. School and teacher influence on the private lives and behavior of students is probably, or could be, greater than is generally realized. This may be especially true in a boarding school like Haskell, where dormitories are "home" to the students.

Even if this assumption of "private life importance" were proved by the survey to be incorrect, then that very fact was thought well worth determining. To develop high levels of skill or competence is probably useless if other employee behavior negates this competence; or, if listed general, personal, or work habits are found to be of little concern to raters, incidental teaching time now devoted to these topics might well be redirected toward attainment of needed technical capabilities.

Part I: Survey of Office Practice Supervisors

The Preliminary Survey. In the preparation of any rating scale or questionnaire, most authorities indicate that it is wise to formulate a preliminary draft and to secure criticism of its make-up and content. Submission of copies to a few individuals similar to those who are to eventually receive the form is recommended, with the raters being asked to complete the questionnaire and to offer suggestions or criticisms for improvement.¹ It was thought that by following this procedure ambiguous or confusing questions could be revised and improved, and irrelevant questions either made relevant or eliminated.

The tryout group selected for the rating scales used in this study was thought to be an appropriate one; they were the fifteen office practice supervisors on the Haskell campus. Each work day these persons supervise, and are given clerical assistance by, 19 office practice students who are seniors in the Commercial Department. Each office practice student serves

¹J. Francis Rummel, An Introduction to Research Procedures in Education, p. 98.

during a nine-week training period, 55 minutes daily, with occasional overtime in some cases. Evaluations in these rating scales were based on supervision and observation of office practice trainees during the second school quarter of the 1959-1960 school year, November 16, 1959 to January 22, 1960. Office practice supervisors are regularly required to evaluate their trainees at the end of the training period, and to assign an overall letter grade. This evaluation is much less detailed than the ratings called for by the preliminary survey.

Purposes of the Preliminary Survey. As already indicated, a prime purpose for the trial run was to test the rating scale forms being used for appropriateness, simplicity, clarity, effectiveness in obtaining desired information, apparent validity and reliability, practicality, attractiveness, comprehensiveness, and response motivation. The objective was to determine bases for questionnaire refinement in order that the best possible forms would be presented to the ultimate evaluating group. This objective presupposed a similarity between the trial survey raters and the major survey respondents. If the rater and ratee personnel corresponded markedly and the situations were almost identical, the preliminary survey was expected to do no more than reveal whether the survey instrument met the tasks assigned it. A secondary purpose of the preliminary survey was to provide the questioner with the opportunity to proceed through his evaluative process to see what kind of results might be obtained, and whether these might be of value and useable to resolve the questions which prompted the survey.

Although the results of a trial run are valueless per se in most cases, there may be exceptions. The instant case was thought to be such

an exception. Since the responding group included the entire body of office practice supervisors at Haskell, the results were thought to have a unique identity, and to be the bases for some significant conclusions, even though the number of respondents was not large. Further, as will be shown later, the office practice situation was found not to be as similar to the paid-employment situation as would be hoped. This being the case, the nature and value of the preliminary survey developed somewhat differently than anticipated. More specifically, while it was first intended that the "dry run" should be solely a questionnaire-improving activity, results indicated that, due to situational differences already mentioned, this objective was not well met. Rather, the rating scales came to be treated as a serious Office Practice Program-evaluative device. However, it should be added that the trial run did provide information valuable to the writer in conducting the major survey, but it was thought that the preliminary study might have a greater effect upon interpretation of the office practice program than in neatly defining the ideal media for employer interrogation. For these reasons, both Part I and Part II have been included in this paper.

Preliminary Survey Respondents. Some information concerning the office practice program has already been provided. For better understanding the scope of the Part I survey, a list of office practice billets is presented below. Attention is called to the fact that in some cases the sex of the office practice trainee is prescribed. Girls are not permitted to work in certain jobs, and boys are not permitted to work in certain other billets. This limitation has created some assignment problems, particularly since girls outnumber boys in the student body as they do.

ADMINISTRATIVE OFFICE, one boy
 PRINCIPAL'S OFFICE, one girl or boy
 REGISTRAR'S OFFICE, one girl or boy
 GIRLS' GUIDANCE OFFICE, one girl
 GIRLS' DORMITORY OFFICE, one girl
 BOYS' GUIDANCE OFFICE, one boy
 DIRECTOR OF GUIDANCE, one boy or girl
 VOCATIONAL DEPARTMENT OFFICE, one boy and one girl
 RECREATION DEPARTMENT OFFICE, one boy
 COMMERCIAL DEPARTMENT OFFICE, one girl or boy
 INDIAN EDUCATION (pamphlet distribution) OFFICE,
 two girls or boys, or one of each
 STUDENT BANK, two girls
 HOME ECONOMICS DEPARTMENT, two girls
 PUBLICATIONS DEPARTMENT, one girl or boy

The program included 19 students under the supervision of 15 supervisors. Because of the confidential nature of the survey and because it has been thought no useful purposes would be served by including the names of either raters or ratees, these have been omitted.

Purposes of the Office Practice Training Program. The general objectives of all office practice programs are probably quite similar, and understood by all persons familiar with business education. An official Statement of Purposes and Functions of the Office Practice Program at Haskell Institute has been given in Appendix C.

Presentation of Rating Scales to Office Practice Supervisors. The comprehensive rating scale forms having finally been fully developed, each office practice supervisor was presented the full packet of 17 pages. A duplicate set of these forms, with the results from Part I of the study, is presented in Appendix B. The writer made personal delivery of each set of forms. Materials for each supervisor were packaged in a large folder and clearly marked as being confidential.

In the instruction sheet for the Occupational Proficiency Rating Scales used in both parts of the study a handwritten "X" was placed to the left of both instruction number 3 and instruction number 8 to call particular attention to the intended separation of the needs of a position (item importance evaluation) from the fulfillment of those needs (employee performance evaluation). Also, in both parts of the study, before issuance of rating scale sheets to raters each sheet was marked with a code number to identify the student or graduate to be evaluated. Such code numbers served to identify raters, also, of course. A sample number was "7-32," indicating the thirty-second student listed in the Class of 1957. Before issuance of sets of rating scales, appropriate insertion of rater and ratee names was also made where called for.

With the delivery of rating scale forms to the office practice supervisors, a covering memorandum like the one shown in Appendix B was included. The writer presented a carefully planned oral explanation of the study to each office practice supervisor at the time of personal delivery of the rating scale forms.

General Reaction of Preliminary Survey Raters. While the general attitude toward the project was one of acceptance, a common complaint was that the rating scales were too long. This was a real problem—one which seemed to demand that the size of the rating forms be cut down. But all the information asked for was thought to be vital to overall curriculum evaluation; if not from the point of view of office practice supervisors, then from the point of view of employers.

Another justifiable criticism was that the various scale instructions, notably those for the Occupational Proficiency Rating Scales, were quite long and involved. Reasons for retaining the original instructions in the major survey will be given later.

In general, the Part I respondents limited themselves to answering within the listed categories; that is, relatively few remarks or comments were added to the scales, even though this possible means of expression was constantly before the raters. The length of the scales doubtless had some influence in this respect. It was hoped, however, that the questioning structure was so comprehensive that subjective material was considered unnecessary. It seems pertinent to add that one rater felt that an "important" column should have been added between the "very important" and "fairly important" columns in the Occupational Proficiency Rating Scales.

The total response to the preliminary survey was exceptionally gratifying. Each of the 19 sets of scales was completed. It was recognized, however, that the raters had a vested interest, both in the students rated and in the Office Practice Program. The proximity of supervisors and the ease with which follow-up could be accomplished had much to do with the overall response. The requirement of periodic office practice trainee evaluations having been established as a precedent, a positive response was to be expected. In short, many factors which tended to assure a high percentage of answers from the campus group were not expected to be present when the employers of graduates were to be contacted. Although considerable response resistance was anticipated in the major survey, it will later be pointed out that a number of factors did promote a large return.

Part II: Survey of Employers

Part I of the study, the preliminary survey of office practice supervisors, was completed in January, 1960. The written report of the initial survey was not completed until April, 1960, however. Based on the findings of Part I, plans were made to conduct the survey of employers or Part II of the study.

It was decided that employers of the graduates of the Classes of 1957, 1958, and 1959 would be the intended respondents for the major survey. As many evaluations as possible were wanted, but it was felt that evaluations of training received by classes which graduated before 1957 would be so permeated with experience as to not be subject to objective appraisal. Employers of the Class of 1960 were not contacted, for it was felt that the periods of employment on which such evaluations would be based would be too short to be reliable.

Lists of graduates for the three years named were obtained from the registrar. The Class of 1957 included 57 graduates, 48 girls and nine boys; the Class of 1958 included 75 graduates, having 59 girls and 16 boys; the Class of 1959 included 67 graduates, with 57 girls and 10 boys. Totals for the three years were 164 girls and 35 boys, or 199 graduates.

Subject to the cooperation of graduates, a file is maintained in the Commercial Department office showing current employment of former students. From this source a tentative mailing list was prepared for the mailing of preliminary questionnaires.

Permission was obtained from Haskell officials to use official Bureau of Indian Affairs, Department of the Interior stationery in the conduct of Part II of the study, and all correspondence was undersigned by the Department

Head and the Superintendent, as well as by the investigator. This official approval, it was felt, had much to do with the favorable receptivity of respondents.

The preliminary questionnaire form, a copy of which is shown with its cover letter in Appendix E, was prepared not only to obtain general information, but more especially to ascertain the current employment addresses of graduates and to identify supervisors of graduates. The simplicity of the questionnaire and the enclosure of return-addressed envelopes aided in the attainment of a good response. During the first two weeks of June, 1960 a total of 210 preliminary questionnaires were mailed concerning 191 of the 199 students. Addresses of the remaining graduates could not be obtained. Of the 210 mailed, 169, or 80 per cent, were completed and returned; 21, or 10 per cent, were not completed, but were returned; two, or one per cent, were answered by letter but without the return of the questionnaire forms. There was no response of any kind from 18 employers, constituting nine per cent of the number mailed. A response from 91 per cent of the respondents was considered excellent.

Based on the returns from the preliminary questionnaires, mailing lists were drawn up for use in sending the full packet of rating scales. It was decided that the scales and instructions used for Part I would be retained in Part II because the preliminary survey revealed no glaring weaknesses, other than length of the scales, and the risk of a low rate of return was considered well worth taking in order to make a truly comprehensive study. Furthermore, the high rate of return on the preliminary questionnaire suggested that the responding group was a generally cooperative one.

Each set of rating scales was accompanied by a cover letter such as is shown in Appendix F. The cover letters were individually typewritten, and personalized; the addressee's name appeared at least three times in each letter. The cover letters were longer than authorities would recommend, but it was felt necessary to convey a considerable amount of information and the writer's rationale was that obvious careful attention on the part of the investigator would prompt similar attention by the respondent. Use of official stationery and the sanction of administrative personnel, already mentioned, undoubtedly increased the effectiveness of such letters. The scales were mailed in 10" x 15" envelopes. Return-addressed envelopes were included in each mailing. Every envelope was plainly marked "CONFIDENTIAL -- IN RE PERSONNEL."

Because of the task of preparing individual cover letters, the scales were not all sent simultaneously. The bulk of the rating scales mailed were sent during June and July, 1960. A few were mailed thereafter. Ultimately, rating scales had been mailed as follows: 37 to employers of members of the Class of 1957; 60 to employers of the Class of 1958; and 51 to employers of the Class of 1959.

A number of follow-up letters, such as is shown in Appendix F, were mailed beginning the first week in September, 1960, and intermittently thereafter.

Receipt of completed rating scale forms began in late June, 1960, and, with the aid of follow-up letters, continued until April, 1961. Most scales were well filled in. Those which were quite incomplete and not useable were returned to the respondent with the request that they be completed and returned.

At the time the first mailings were made for Part II an arbitrary goal of 100 responsee was set, based on the number of prospective respondents available. Because of the extreme size of the survey instruments, however, there was not a great deal of confidence that the goal could be achieved. Each fully completed set of rating scales proper would require 363 separate responses by each rater, and completion of the Occupational Proficiency Rating Scale data sheet would add another 19. Counting the responses in the preliminary questionnaire, a total of 403 responses was sought from each survey respondent.

The goal of 100 useable returns was reached in March, 1961. However, duplicate evaluations of three employees were included in this number. By April 4, 1961 three more returns had been received, thus eliminating the need to tabulate more than one set of ratings for any employee. Two more returns were received after computations were begun, and therefore they were not used in the study.

Counting only the 100 evaluations used, response to the mailing of rating scales for Part II was as follows: (1) of the 37 mailed to employers of the Class of 1957, 18 or 76 per cent were returned; (2) of the 60 mailed to employers of the Class of 1958, 36 or 60 per cent were returned; (3) of the 51 sets of rating scales mailed to employers of the Class of 1959, 36 or 71 per cent were completed and returned. Of the 148 rating scale sets mailed, 100 were completed, returned, and used in the study. The rate of return was 68 per cent. Of the 199 graduates in all three classes, half were evaluated in Part II of the study. Of the 148 rating scale sets mailed, 105 were completed and returned. The rate of return, including

the unused scales, was 71 per cent. The overall response was considered excellent in view of the complexity of the rating scales and the time and effort involved in their completion.

In the survey reported by Holdridge, previously cited, 450 questionnaires were sent and 208 replies, or 46 per cent, were received.¹ The Holdridge questionnaire was directed to a selected list of physicians, and included only 16 structured and six optional response items.

In the survey reported by Chapman, previously cited, 106 questionnaires were sent, and 88 replies, or 83 per cent, were received.² The Chapman questionnaire was directed to graduates themselves. The form and content of the questionnaire used was not indicated, but the reported findings suggested that the scope of the study was much smaller than the present one.

One source states that:³

The average percentage of returns reported for follow-up studies appears to be somewhat higher than returns commonly reported for questionnaire studies.

In view of the above information, the response to the major survey would appear to be quite acceptable.

Although results of the rating scales in Part I were hand tabulated, the results obtained in Part II were not. Upon recommendation of proper officials at Kansas State University, the writer was allotted machine time at the University of Kansas Computation Center. Using an IBM Model 26 Key

¹Holdridge, op. cit.

²Chapman, op. cit.

³"Follow-Up of Secondary School Students," op. cit., p. 30.

Punch machine, the writer key punched 600 IBM data cards to record the information obtained from the 100 returns. An IBM sorting machine was used to sort and count cards according to responses received in each column. Totals were manually recorded. The tabulations were organized and made ready for interpretation.

CHAPTER V

FINDINGS

General Information

Since the study has been divided into two parts, the report of results obtained has been separated into: Findings: Part I, which presents the information yielded by the preliminary survey of office practice supervisors, and Findings: Part II, which presents the results of the major survey of employers.

The essence of the findings has been presented quite completely in the Appendices. All information given in the following narrative of findings was developed from materials included therein. Although frequent referral to the various appendices seems a serious nuisance and annoyance, it is recommended as the most efficient means of grasping the entire field of information provided by the study. The narrative of the findings sections, though lengthy, relates only the more significant results and salient relationships of the study.

In each of the two parts of the findings, the following rating scales are discussed: Estimate of Instructional Efficiency, Instructional Area Time Allotment Evaluation, and each of the twelve sections which comprise the Occupational Proficiency Rating Scales. Two sets of rating scale forms, as presented to office practice supervisors and employers for completion and return, have been included in the appendices: Appendix B presents the total results obtained from Part I; Appendix G presents the total results obtained from Part II.

Findings: Part I

Estimate of Instructional Efficiency. The matter of instructional efficiency or teacher competence has long been a delicate and controversial subject. Since a relatively small number of opinions was included in the preliminary survey, no detailed summary of findings is presented here. The results may be read in Appendix B.

A number of significant observations were made concerning the Estimate of Instructional Efficiency Part I results, however: (1) of the 171 possible responses, approximately half were answered in the "no estimate" category; (2) Typing was the only subject area for which all respondents gave an estimate of instructor performance; (3) five subject areas each received "no estimate" responses from 13 or more of the 19 respondents; (4) Duplicating Machines was the only subject area to receive an "outstanding" rating; (5) Business English was the only subject area to receive a "barely satisfactory" rating; (6) all but two of the votes which were cast for some level of performance were placed in the "very good" or "average or satisfactory" columns; (7) responses for the Office Practice area were not recorded because it was not thought proper to have Office Practice Supervisors rate their own performance; and (8) even though a very small trial group was used, there were intimations as to areas of strength and weakness in instruction.

The most significant observation made concerning this scale in Part I was that the raters so often answered with "no estimate" responses. There may have been several reasons for such a high percentage of "no estimate" responses. Supervisors may have been so busy with other tasks that they did not have time to scrutinize the work of their trainees. Office practice training occurs near the end of the school and working day, after regular

class periods are over. It is during these non-class "late-in-the-day" periods that most faculty and staff communicative work is done, and this may have been another reason why supervisors were not so attentive to the work of their trainees. Also, the raters have the responsibility of supervising housecleaning detail work, and this supervision may have been in competition with that of the trainees. Supervisors' reluctance to judge their fellow staff members, and the small amount of time devoted to office practice training were thought to be other possible reasons for the high percentage of "no estimate" responses in the preliminary survey.

The fact that raters frequently declined to estimate instructional efficiency in several of the subjects was interpreted to be an indication that training in those areas was not being utilized in the office practice program. The instructions for this estimate said, "Use column 6 (no estimate) only if the subject area being considered is not a part of the employee's job." The only area in which there were not any "no estimate" responses was Typing, for which 58 per cent of the responses indicated that the training received was very good, and 42 per cent indicated that the training was average or satisfactory. The fact that there was a 100 per cent estimate in one subject area suggested that non-estimation in other cases was not based merely on a reluctance to evaluate other staff members' work, but rather, in not having offered trainee experience in the non-estimated areas.

As shown in Appendix B, 49 per cent of all answers concerning instructional efficiency were "no estimate" responses. Half of the responses were equally divided between "very good" and "average or satisfactory," and the

remaining one per cent was equally divided between "outstanding" and "barely satisfactory."

The primary difficulty in using this rating scale in the survey stemmed from its "must have been" characteristics. Raters perhaps found it impossible to separate competence emanating from "native ability," as against competence derived from "training." Further, proficiency in some subjects, for example, Typing, depends more upon training than does proficiency in certain other subjects such as Business Law, which make greater demands upon the intellect. Even so, the scale may provide useful information, for it has given raters an opportunity to compare the training in the various subject areas of the commercial curriculum. If the results are viewed with an awareness that high ratings may be partly caused by high natural ability, and that low ratings may be caused by low employee natural ability, then the estimates may have value.

Instructional Area Time Allotment Evaluation. Complete results of this rating scale are given, for Part I, in Appendix B. Returns from the preliminary survey indicated that, so far as office practice trainee positions were concerned, the amount of training provided was substantially in excess of that needed. Eighteen of the responses as to Business Law training time showed the amount to be wasted or not needed, and the other respondent did not answer. Seventeen Voice Writing responses showed the training time to be excessive. Only four of the 19 respondents thought Bookkeeping and Accounting training time was about right for the trainee position; the other 15 thought the time spent was too much.

Only for Typing was there an indication that the time spent in training was optimum. Seventy-one of the 171 possible responses, or 42 per cent,

were marked in the "wasted, not required on this job" column for all subject areas combined. Even so, there was some indication that certain students (four of 19) needed more training for some phase of the office practice jobs to which they were assigned.

When first developed, it was hoped that this scale might show which courses should be curtailed and which should be fortified timewise. Responses of training supervisors merely indicated that there was more training time given, generally, than required for their purposee.

As previously shown, little use has been made of Business Law or Voice Writing Machines training in the office practice program. With regard to the former, this seems quite understandable; also, since voice writing equipment was available at only five of the 15 office practice supervisory stations, it might be very difficult to increase the on-campus use of this skill. Some thought might be given, however, to a machine pool, or to the rotation of some voice writing equipment on a scheduled basis. This would call for a degree of skill and planning on the part of supervisors.

Large percentages of "no estimate" answers were received for: Bookkeeping and Accounting, Business Mathematics, and Adding Machines and Calculators. There may be few opportunities for application of bookkeeping and accounting training in the campus positions, but it would seem that there might be greater call for business mathematics or commercial arithmetic, and for adding machines skills.

In view of the wide discrepancies between training time offered and training time needed for office practice performance, the issue becomes one of deciding whether the course of study involves "over-training" or whether the office practice program is definitely "under-challenging."

Regardless which answer is correct, some changes would be in order.

Occupational Proficiency Rating Scales Section Analysis. The Estimate of Instructional Efficiency rating scale was designed to point out which subjects are well-taught, needing little course revision, and which subjects are not well-taught, suggesting a need for instructional improvement. Similarly, the Instructional Area Time Allotment Evaluation rating scale was developed to reveal the subjects in which too much training time is spent, and those in which insufficient time is used, both of which have implications for change. While the limited size of the preliminary survey would prevent the drawing of definite conclusions, it did indicate that time spent in training and office practice use of training were incompatible, and also indicated that a major survey on these topics would be fruitful.

The Occupational Proficiency Rating Scales are more specific than are the other two scales mentioned above. The twelve proficiency rating sections carefully evaluate each of many traits, characteristics, abilities, and skills. Results of the preliminary survey are set forth in detail in Appendix B. The comments and tables on the next several pages show rather clearly the scales which were thought to be relatively important in considering office practice jobs, and those which were thought to be less important; also, to distinguish the areas in which students seemed best equipped from those in which they seemed to their office practice supervisors to be less competent.

Part I, Total "Very Important" Responses Compared With Total Responses Possible. Although there is no substitute for an item-by-item analysis of the importance of all items to the positions evaluated, as shown in Appendix B, it was considered useful to compare the aggregate of "very important"

responsee for a section with the total responses possible, and also to list the various sections in order, by percentage of "very important" responses. Based on results from the preliminary survey, such a comparison and listing is presented in Table 1. It should be kept in mind that all raters were instructed to base their ratings on the particular job which the rated person was filling—not on clerical jobs in general.

It was thought that those scales having a high percentage of "very important" responsees would yield more information than those which had a low percentage. That is, the rater was more apt to have an opinion, it was believed, concerning something he considered important; further, that the opinion was thought to have greater validity and reliability than if founded on a question regarded by the rater as being unimportant.

Table 1. Part I Occupational Proficiency Rating Scales section-by-section rank order breakdown showing percentage relationships of total "very important" responsee to total responsee possible.

rank	scale	total responses possible*	no. of "very impt." responsee	% of "very impt." responsee
1	Work Habits	532	284	53%
2	General Characteristics	532	270	51%
3	Typing	228	97	43%
4	Business English	342	120	35%
5	Personal	247	82	33%
6	Duplicating Machines	247	59	24%
7	Shorthand & Transcr.	190	31	16%
8	Bkpg. & Accounting	323	39	12%
9	Add. Mach. & Calc.	95	7	7%
10	Business Mathematice	285	16	6%
11	Voice Writing Mach.	38	1	3%
12	Business Law	190	2	1%
	totals	3,249	1,008	31%

(*) determined for each section by multiplying the number of items in that section by 19, the number of students evaluated.

Table 2 was developed from material contained in Appendix B. Table 2 does not tell us that work habits are important. It does not say that the sections having a low percentage of "very important" responses are unimportant. It does say that of the 532 possible responses to items concerning what the writer has called Work Habits, 284, or 53 per cent, were placed in the "very important" category, rather than in the "fairly important" or "not important" columns. To the office practice supervisors, the Work Habits items asked about seemed slightly more important, overall, than did the General Characteristics items. Typing items evaluated were deemed somewhat more important, overall, than the Business English items. The total of "very important" responses for all items was 31 per cent. Sections having "very important" percentages of less than 31 per cent were: Business Law, Voice Writing Machines, Business Mathematics, Adding Machines and Calculators, Bookkeeping and Accounting, Shorthand and Transcription, and Duplicating Machines.

Total "Not Important" Responses Compared With Total Possible Responses. Since it was thought worthwhile to relate the number of "very important" responses for each section to the number of responses that might have been so recorded, it was also thought useful to compare the aggregate of "not important" responses for a section with the total responses possible, and also to list the various sections in reverse order, by percentage of "not important" responses. This would not be useful if but two choices as to relative importance were offered, for in such case anything not regarded as important would be unimportant. However, those items which were not chosen as being "very important" might either be marked "fairly important" or "not important." For the purposes of this study a rank order listing comparing

"not important" responses with total responses possible was thought useful. Such a comparison is presented in Table 2.

Table 2. Part I Occupational Proficiency Rating Scales section-by-section rank order breakdown showing percentage relationships of total "not important" responses to total responses possible.

rank	scale	total responses possible*	no. of "not impt." responses	% of "not impt." responses
1	Work Habits	532	21	4%
2	General Characteristics	532	40	8%
3	Personal	247	42	17%
4	Typing	228	39	17%
5	Business English	342	68	20%
6	Duplicating Machines	247	108	44%
7	Shorthand & Transcr.	190	102	54%
8	Add. Mach. & Calc.	95	63	66%
9	Voice Writing Mach.	38	29	76%
10	Business Mathematics	285	222	78%
11	Bkpg. & Accounting	323	255	79%
12	Business Law	190	178	94%
	totals	3,249	1,167	36%

(*) determined for each section by multiplying the number of items in that section by 19, the number of students evaluated.

Total "Performance Not Known" Responses Compared With Total Responses Possible. One reason that office practice supervisors did not have complete information concerning office practice trainees was the limited amount of training time used. "Not known" responses may stem from this. However, a high percentage of "not known" answers might also indicate that the items involved were not of sufficient importance to the position to be observed or evaluated. With this in mind, it may be proper to present a section-by-section comparison of "performance not known" responses with total responses possible, beginning the rank order with the smallest percentage of "not

known" responses and progressing to the largest. Table 3, like the two preceding tables, was developed from material contained in Appendix B.

Table 3. Part I Occupational Proficiency Rating Scales section-by-section rank order breakdown showing percentage relationships of total "performance not known" responses to total responses possible.

rank	scale	total responses possible*	no. of "not known" responses	% of "not known" responses
1	General Characteristics	532	59	11%
2	Work Habits	532	95	18%
3	Typing	228	52	23%
4	Business English	342	107	31%
5	Personal	247	105	43%
6	Duplicating Machines	247	156	63%
7	Shorthand & Transcr.	190	129	68%
8	Add. Mach. & Calc.	95	73	77%
9	Business Mathematics	285	236	83%
10	Bkpg. & Accounting	323	282	87%
11	Business Law	190	186	98%
12	Voice Writing	38	38	100%
	totals	3,249	1,518	47%

(*) determined for each section by multiplying the number of items in that section by 19, the number of students evaluated.

The results of the preliminary survey indicated that office practice supervisors felt competent to make student judgments in the General and Work Habits areas, but claimed to know practically nothing about students' competencies as itemized in the section on Business Law. They claimed a lack of knowledge concerning levels of ability called for by the Voice Writing Machines section. These facts raised the following questions: Have the right skills been taught? If not, what skills should be taught? If so, why have these skills not been used or evaluated in the office practice training program?

It has been thought that each rating scale comprehensively covered the skills and traits required for success in its given area. Such being the case, assignment of a high relative or low relative section importance by office practice supervisors had some significance. Where high importance was reported, the section included items which the supervisors thought should be asked. Where there was low importance, the section apparently requested evaluation of items which, to the supervisors, seemed irrelevant to the office practice trainee positions. Where limited importance was attached to the questions asked, it may well be wondered why. The statement of certain assumptions may help to clarify this.

First, it was assumed that the Haskell Commercial curriculum attempts to qualify students for acceptable performance in nearly all of the items named; it should be remembered that the suggestions of teachers were used in developing the content of the Occupational Proficiency Rating Scales. If, then, it was found that these items were thought to be unimportant, the curriculum may be remise in attempting to develop competencies which are not called for. It has also been assumed that the office practice trainee positions are fairly representative of regular post-graduate employment positions filled by Haskell Commercial graduates. The high percentage of "not important" or "performance not known" responses in some sections has cast considerable doubt upon this last assumption. Or, if the assumption is correct, then the underlying assumption that the Haskell Commercial Curriculum prepares students to competently enter the modern clerical field is fallacious and the curriculum is out of adjustment. These were the very questions which the major survey sought to, and did, answer.

Considerable attention has been paid to the relative "importance" of the various sections, through comparisons of percentages of "very important," "not important," and "not known" responses. Section analyses of performance evaluations are equally necessary.

Total "Above Average" Performance Responses Compared With Total Responses Possible. Even in the "test run" of a survey, the results may have some importance in and of themselves. The writer has felt that this was especially true in Part I of this study, where the opinions of every office practice supervisor on the Haskell campus were obtained. Supervisory opinions as to our students were thought important. The opinions of 15 adults may not be as definitive as those of 100 adults, but they may, nonetheless, be revealing. It is more important that we satisfy employers, but it is also important that office practice people be satisfied with student training. Inability to please office practice supervisors surely would suggest inability to satisfy employers.

Although there is no substitute for an item-by-item analysis of student performance in all sections of the Occupational Proficiency Rating Scales, as given in Appendix B, some conclusions may be drawn from comparing the aggregate of "above average" responses for a section with the total possible responses, and in listing the various sections in order, by percentage of "above average" responses. Treating "outstanding" and "very good" ratings as "above average," and similarly lumping together "barely satisfactory" and "not satisfactory" ratings as "below average," such a comparison and listing is shown in Table 4.

Table 4. Part I Occupational Proficiency Rating Scales section-by-section rank order breakdown showing percentage relationships of total "above average performance" responses to total responses possible.

rank	scale	total responses possible#	no. of "above av." responses*	% of "above av." responses
1	Personal	247	88	36%
2	Typing	228	68	30%
3	General Characteristics	532	140	26%
4	Work Habits	532	115	22%
5	Business English	342	70	20%
6	Shorthand & Transcr.	190	35	18%
7	Duplicating Machines	247	29	12%
8	Add. Mach. & Calc.	95	10	11%
9	Bkpg. & Accounting	323	14	4%
10	Business Mathematics	285	12	4%
11	Voice Writing Mach.	38	0	0%
12	Business Law	190	0	0%
	totals	3,249	581	18%

(#) including "performance not known" responses.

(*) section summations of "outstanding" plus "very good" performance responses.

It must be remembered that training is but one factor in performance, for native intelligence, motivation, and other elements play their roles, also. Too, a level of performance which seems "outstanding" to one supervisor might seem very mediocre to another. In spite of these limitations, some reasonable general notions may be arrived at, and where there is marked cleavage in the tabulation of large numbers of responses, some confidence may be placed in the results.

Total "Above Average Performance" Responses Compared With Total Responses Obtained. The comparison of "above average" ratings total with total responses possible, while yielding information, does not take into account the influence of "performance not known" responses in the various sections. Table 5 compares "above average performance" ratings totals, not with total responses

possible, but with total responses obtained. Some rather notable percentage differences can be seen through matching sections of the preceding table with the one which follows. For example, while the 35 "above average performance" responses constituted only 18 per cent of total responses possible in the Shorthand and Transcription section of the preliminary survey, these responses represented 57 per cent of the total number of responses obtained for that section, excluding all "performance not known" responses. The Adding Machines and Calculators, and Bookkeeping and Accounting sections show marked increases, also, while the General and Work Habits sections are little changed, and Voice Writing and Business Law remain unchanged.

Table 5. Part I Occupational Proficiency Rating Scales section-by-section rank order breakdown showing percentage relationships of total "above average performance" responses to total responses obtained.

rank	scale	total responses obtained#	no. of "above av." responses*	% of "above av." responses
1	Personal	142	88	62%
2	Shorthand & Transcr.	61	35	57%
3	Add. Mach. & Calc.	22	10	45%
4	Typing	176	68	39%
5	Bkpg. & Accounting	41	14	34%
6	Duplicating Machines	91	29	32%
7	Business English	235	70	30%
8	General Characteristics	473	140	30%
9	Work Habits	437	115	26%
10	Business Mathematics	49	12	24%
11	Voice Writing Mach.	0	0	0%
12	Business Law	0	0	0%
	totals	1,727	581	34%

(#) excluding "performance not known" responses.

(*) section summations of "outstanding" plus "very good performance" responses.

Total "Below Average Performances" Responses Compared With Total Responses Possible. Reference to "above average performance" ratings only, to the exclusion of less favorable ratings, would present a one-sided view of section relationships. Although some correlation may be expected, it does not necessarily follow that a section having a high percentage of "above average" ratings must have a very low percentage of "below average" responses. A section which had 20 per cent of the responses in the "above average performance" category might have no responses in the "average" column and 80 per cent of the responses in the "below average" group; or, the same section might have 80 per cent of the responses in the "average" category and no responses in the "below average" group. Therefore, a more complete picture can be drawn by comparing the aggregate of "below average performance" responses for a section with the total possible responses, and listing the various sections in reverse order, by percentages of "below average" ratings. Such a comparison and listing is presented in Table 6. Sections having the smallest percentages of "below average" ratings of student performance are presented first as, theoretically, the best training would result in a minimal amount of inferior trainee performances.

For the most part, the "below average" percentages were so small as to not be suggestive; this is desirable, of course, if it represented actual levels of performance. Office practice supervisors spend so little time with trainees that they may have been reluctant to find fault; possible "halo effects" and bias factors are always present. It was anticipated that Part II results might later show that employers and supervisors in the world of business are more candid than are staff members. Results shown in Table 6 are from Part I only, however.

Table 6. Part I Occupational Proficiency Rating Scales section-by-section rank order breakdown showing percentage relationships of total "below average performance" response to total response possible.

rank	scale	total response possible#	no. of "below av." responses*	% of "below av." responsee
1	Bkpg. & Accounting	323	0	0%
2	Businse Law	190	0	0%
3	Add. Mach. & Calc.	95	0	0%
4	Voice Writing Mach.	38	0	0%
5	Personal	247	2	1%
6	Shorthand & Transcr.	190	2	1%
7	Work Habite	532	7	1%
8	Duplicating Machines	247	4	2%
9	Typing	228	4	2%
10	Businese Mathematics	285	9	3%
11	General Characteristics	532	27	5%
12	Businese English	342	29	8%
	totale	3,249	84	3%

(#) including "performance not known" responsee.

(*) section summatione of "barely satiefactory" plus "not satiefactory" performance responsee.

Total "Below Average Performance" Responses Compared With Total Responses Obtained. As with "above average" ratings, the comparison of "below average" totals with total responses possible, while useful, does not take into account the influence of "performance not known" responses. Some sections have very high percentage of actual performance ratings, while in other sections the raters declined performance evaluation because of lack of information, irrelevance, unimportance, or for other reasons. Table 7 compares "below average performance" ratings totals, not with total response possible, but with total responses obtained in the preliminary survey. The resulting per cents are much more meaningful. Because of the smaller number of undesirable responses, per cents based on total response obtained, found in Table 6,

differ much less from the per cents based on total responses possible, found in Table 7, than was the case in comparing the two methods of "good" response presentation. Even so, the nine "below average performance" responses in the Business Mathematics section, while constituting only three per cent of total responses possible, represent 18 per cent of the 49 section responses actually obtained. Likewise, the 29 "below averages" Business English responses comprise eight per cent of total possible responses, but comprise 12 per cent of the responses actually given in the preliminary survey.

Table 7. Part I Occupational Proficiency Rating Scales section-by-section rank order breakdown showing percentage relationships of total "below average performance" responses to total responses obtained.

rank	scale	total responses obtained#	no. of "below av." responses	% of "below av." responses
1	Bkpg. & Accounting	41	0	0%
2	Add. Mach. & Calc.	22	0	0%
3	Voice Writing Mach.	0	0	0%
4	Business Law	0	0	0%
5	Personal	142	2	1%
6	Work Habits	437	7	2%
7	Typing	176	4	2%
8	Shorthand & Transcr.	61	2	3%
9	Duplicating Machines	91	4	4%
10	General Characteristics	473	27	6%
11	Business English	235	29	12%
12	Business Mathematics	49	9	18%
	totals	1,727	84	5%

(#) excluding "performance not known" responses.

(*) section summations of "barely satisfactory" plus "not satisfactory" performance responses.

Other Analyses. Much of the writing heretofore has pertained to relationships between rating scale sections and between the various subject areas.

Some attention also must be directed toward the merits of the separate items in each of the scales. Appendix D provides answers to the following questions: What items in each section were considered by the preliminary survey respondents to be least important so far as office practice training at Haskell is concerned? What items were least well known, or most frequently left unanswered, by training supervisors? For which items has student performance been least satisfactory? Which items did the training supervisors regard as being most important? For which items was student performance most satisfactory?

In considering the results of Part I of the study, the writer thought that items regarded by supervisors as very important should definitely be included in the major survey--and items unanimously considered not important might be discarded for the major survey; items not at all well known might be inferred to be quite unimportant, and might also be left out. It was thought that items for which performance had been generally good would be included, but items for which performance had been inferior would most certainly be included. At the outset of the study it was thought that questionnaire refinement would be a definite feature of the preliminary survey. However, since Part I results indicated the office trainee billets on the campus might be quite unrepresentative of paid-employment positions, it was not considered feasible to "improve" the rating scale forms on the basis of the findings presented in Appendix D. It was felt that the rating scales should be left intact for presentation to employers of graduates.

Clearly, the results shown in Appendix D are relative. Items regarded as "least important" in one section may, on the whole, be considered fairly important, or at least more important than similar items in another section.

Items listed as being "least well performed" in a given section might, all things considered represent a rather good total performance; for example, for item number 10 in the "personal" section of the preliminary survey scales, there was only one response indicating less-than-satisfactory performance.

In this type of survey, of course, a number of interesting contradictions are bound to be revealed. For example, in the preliminary analysis of the Voice Writing section in Appendix D it can be seen that item number 2 was regarded by one rater as being very important, yet no rater had any notion as to the level of performance for the item. Apparently, the rater knew that the skill was vital to the trainee position, but did not have the time to determine how the trainee performed in that skill. Or, the importance rating may have been based on clerical jobs in general, rather than on the specific trainee position as was requested. In spite of the existence of a few such discrepancies, the data obtained were thought to be meaningful. It was believed that a survey of one hundred persons would reveal trends or conditions that are significant, and the appearance of a small percentage of inconsistencies would not defeat that result.

Findings: Part II

Estimate of Instructional Efficiency. Since Part I of the study dealt with the evaluations of only 19 persons, no detailed presentation of findings as to instructional efficiency was made. The findings in Part II, however, are based on ratings of 100 employees. Some significance might be attached to employer opinions for so large a group.

Expressions of instructional efficiency relationships among the various subject groups have been made in four different ways, each designed to throw some light on which areas have been most efficiently presented to students, and which have been less well presented. The four methods of approach were: (1) listing subject areas in rank order, with those having the highest percentage of above average instructional efficiency responses, related to total possible responses, listed first; (2) listing subject areas in rank order, with those having the highest percentage of above average teaching efficiency responses, related to total responses obtained, listed first; (3) listing subject areas in rank order, with those having the lowest percentage of below average instruction responses, related to total possible responses, listed first; (4) listing subject areas in rank order, with those having the lowest percentage of below average instructional efficiency responses, related to total responses obtained, listed first. For purposes of expressing the relationships indicated, "outstanding" and "very good" instruction ratings have been lumped together and called "above average" responses; likewise, "barely satisfactory" and "not satisfactory" ratings have been added and identified in the aggregate as "below average instruction" responses.

Comparison of Above Average Instruction Responses With Total Responses Possible. Theoretically, since the full range of courses has been required of all Haskell Commercial graduates, each subject area has had as much chance to be "performed in" by a graduate as any other area. That is, a graduate through his performance in Business Machines operation has had as much opportunity to reflect credit upon the instruction he received in Business Machines as he has had, through his performance in Typing, to reflect credit upon the Typing instruction he received. The opportunities are not equal in fact, of course, for as a practical matter there is a greater demand in offices for some skills than for others. Even so, the writer felt that it should be pointed out in which subject areas the greatest number of favorable instructional efficiency evaluations have been made, based on the total number of evaluations which could have been made. Such a procedure ranks too low the quality of instruction in areas little used by business, but places in proper perspective the subject areas which have received the most favorable total response from employers.

Table 8 ranks the subject areas according to total number of estimates of "above average" instructional efficiency. Since the total number of persons evaluated was 100, there should have been 100 ratings of instructional efficiency; therefore, the number of responses given may be interpreted as percentages as well as numbers.

Rank alone was not thought particularly significant; percentages are perhaps more meaningful. However, the two should be considered together. Sixty per cent of total responses possible indicated that instruction in Typing was above average. Of the 100 recent graduates whose performance was

evaluated, only one employee's performance led his employer to think that his Business Law instruction must have been above average.

Table 8. Part II Estimate of Instructional Efficiency subject area rank order breakdown showing percentage relationships of total "above average instruction" ratings received compared with total ratings possible, 100.

rank	subject area	number and/or percentage of "above average" responses
1	Typing	60%
2	Business English	41%
3	Office Practices	36%
4	Shorthand and Transcription	29%
5	Adding Machines and Calculators	27%
6	Duplicating Machines	24%
7	Bookkeeping and Accounting	15%
8	Business Mathematics	13%
9	Voice Writing Machines	12%
10	Business Law	1%
		26%

Comparison of Above Average Instruction Responses With Total Responses Obtained. A truer picture of instructional efficiency might be presented by dividing total responses obtained into the number of "above average instruction" response for a given subject, rather than by using only the total responses possible as the divisor. This presentation would seem more realistic to the instructor who has done a fine job of teaching, but whose field of training has not been used on the job by many graduates. For a subject area evaluated by nearly all respondents the shift in rank and in percentage was hardly noticeable. Typing ranked first in both tables, with 60 per cent above average response of total responses possible, and 61 per cent above average response of total responses obtained. Business Law, with only 19 response obtained, jumped from one per cent above average response

of total responses possible to five per cent of total responses obtained; however, this fivefold increase resulted in no change in rank. Voice Writing Machines instruction appeared in a much more favorable light when the number of responses actually received was taken into account, rather than the total number of responses possible. Other subjects which showed higher ranking in Table 9 than in Table 8 were Shorthand and Transcription, and Duplicating Machines. Opinions as to the quality of Office Practice instruction were substantially different in the two tables if ranking alone is considered. Tables 8 and 9 are both thought to be most meaningful when viewed in relation to each other.

Table 9. Part II Estimate of Instructional Efficiency subject area rank order breakdown showing percentage relationships of total "above average instruction" ratings received compared with total ratings obtained.

rank	subject area	total responses obtained	number of "above av." responses	% of "above av." responses
1	Typing	99	60	61%
2	Shorthand & Transcr.	62	29	47%
3	Business English	91	41	45%
4	Voice Writing Mach.	28	12	43%
5	Duplicating Machines	59	24	41%
6	Add. Mach. & Calc.	66	27	41%
7	Office Practice	88	36	41%
8	Bkpg. & Accounting	40	15	38%
9	Business Mathematics	45	13	29%
10	Business Law	19	1	5%
	totale	597	258	43%

Comparison of Below Average Instruction Responses With Total Responses Possible. The quality of instruction should not be surveyed with reference solely to above average responses. For curriculum improvement purposes, the frequency of below average responses may be even more meaningful.

The writer felt that it should be pointed out in which subject areas the greatest number of unfavorable instructional efficiency evaluations have been made, based on the total number of evaluations which could have been made. Such a procedure may not properly identify areas of instruction which received relatively small numbers of poor responses only because the number of total actual responses in their areas of instruction were small. However, Table 10 places in proper perspective the subject areas which have received the largest numbers of unfavorable responses.

As seen in Table 10, the total number of below average responses for the Estimates of Instructional Efficiency scales was very small. This speaks well for the overall quality of instruction evaluated. Subject areas which received the greatest numbers of below average responses were English, 16, and Shorthand and Transcription, 11. Employers of only two of the 100 rated graduates were prepared to say that, based on the performances of their employees, instruction in Duplicating Machines must have been poorer than average. A like number responded that instruction in Voice Writing Machines must have been below average. It should be remembered that these "must have been" evaluations were an indirect method of rating teacher performance, requiring assumptions as to knowledge of employee native capacity, course content, and time spent in training.

The "average" number of below average responses in Table 10 indicates that six per cent of the 100 recent graduates rated must have received instruction of less than average quality. Stated another way, the "average" Haskell Commercial teacher must have, in teaching 100 students, done a below average job of instructing six of them.

Table 10. Part II Estimate of Instructional Efficiency subject area rank order breakdown showing percentage relationships of total "below average instruction" ratings received compared with total ratings possible, 100.

rank	subject area	number and/or percentage of "below average" responses
1	Duplicating Machines	2%
2	Voice Writing Machines	2%
3	Adding Machines and Calculators	3%
4	Business Law	3%
5	Typing	5%
6	Office Practice	5%
7	Bookkeeping and Accounting	6%
8	Business Mathematics	7%
9	Shorthand and Transcription	11%
10	Business English	16%
		6%

Comparison of Below Average Instruction Responses With Total Responses Obtained. As in the case of above average instruction responses, a truer picture of instructional efficiency might be presented by dividing total responses obtained for a given subject into the number of "below average instruction" responses for that subject, rather than to use only the total responses possible as the denominator. Table 11 gives a comparison of below average instruction responses with total numbers of responses which were obtained.

Based on total responses obtained, instruction on Duplicating Machines was the best in the Department. Instruction in the following subject areas was sufficiently good that no more than seven per cent of the rated graduates in each case demonstrated performance which caused employers to think that instruction must have been below average: Duplicating Machines, Adding Machines and Calculators, Office Practice, and Voice Writing.

Table 11 shows a definite dichotomy in instructional efficiency as between two "sets" of subject areas. While the largest percentage of unfavorable responses for any of the five areas mentioned in the preceding paragraph was seven, each of the following subject areas was thought to have offered below average instruction in at least 15 per cent of the reted cases: Bookkeeping and Accounting, Business Mathematics, Business Law, Business English, and Shorthand and Transcription. Business English, and Shorthand and Transcription were rated as offering the least effective instruction, with 18 per cent of total responses obtained showing below average instructional efficiency.

Table 11. Part II Estimate of Instructional Efficiency subject area rank order breakdown showing percentage relationships of total "below average instruction" ratings received compared with total ratings obtained.

rank	subject area	total responses obtained	number of "below av." responses	% of "below av." responses
1	Duplicating Machines	59	2	3%
2	Add. Mach. & Calc.	66	3	5%
3	Typing	99	5	5%
4	Office Practice	88	5	6%
5	Voice Writing	28	2	7%
6	Bkpg. & Accounting	40	6	15%
7	Business Mathematics	45	7	16%
8	Business Law	19	3	16%
9	Business English	91	16	18%
10	Shorthand & Transcr.	62	11	18%
	totals	597	60	10%

It should be noted that four subject areas showing the smallest percentages of below average responses were machines skills courses; the areas showing teaching efficiency difficulties were all "thought" courses.

Instructional Area Time Allotment Evaluation. Although Part I of the study did not involve a sufficient body of raters to justify presentation of detailed summaries concerning the apportionment of training time among the different subject areas, it did definitely establish the generalization that training time offered and training time needed for office practice were incongruent. Results based on the 100 evaluations in Part II of the study would appear worthy of further consideration.

As in the case of analyzing instructional efficiency, expressions of training time allotment relationships among the various subject areas were approached in four different ways. The four methods, each of which was intended to contribute some degree of understanding as to which subjects involve too much training time and which too little, were: (1) listing subject areas in rank order, with those showing the lowest percentage of "too much time" responses, related to total possible responses, listed first; (2) listing the subject areas in rank order, with those showing the lowest percentage of "too much time" responses, related to total responses obtained, listed first; (3) listing subject areas in rank order, with those showing the lowest percentage of "too little time" responses, related to total possible responses, listed first; (4) listing the subject areas in rank order, with those showing the lowest percentage of "too little time" responses, related to total responses obtained, listed first.

For purposes of expressing the relationships indicated, the "wasted, not required on this job" and "more than is needed on this job" column ratings have been lumped together and called "too much time" responses. Similarly, the "less than is needed on this job" and "far too little for

this job" column ratings have been added and identified as "too little time" responses.

Because the numbers of answers obtained so nearly approached the total answers possible for the Instructional Area Time Allotment, a comparison of total "too much time" responses with total responses possible yields almost identical results as a comparison of "too much time" responses with total responses obtained. Similarly, a comparison of "too little time" responses with total responses possible gave essentially the same results as a comparison of "too little time" responses with total responses obtained. Consequently, it was thought best to present only the two comparisons involving "obtained responses" in this paper.

Comparison of Total "Too Much Instruction Time" Ratings With Total Ratings Obtained. Of the 91 responses obtained in evaluation of time spent in Office Practice, only four, or 4 per cent, indicated that the time used was excessive and not needed for satisfactory performance of the rated employee position. At the other extreme, of the 97 responses concerning time spent in Business Law training, 73 per cent indicated that the amount of training time used was excessive.

As seen in Table 12, more than half of the respondents rated training time in the following areas as excessive: Voice Writing, 66 per cent; Bookkeeping and Accounting, 59 per cent; Business Mathematics, 53 per cent. Duplicating Machines training time was thought excessive by more than one third of the employers in the Part II survey group, and time used in training Adding Machines skills was thought extravagant by almost one third of the respondents, as they thought in terms of their own employees' positions.

Table 12. Part II Instructional Area Time Allotment Evaluation rank order breakdown showing percentage of total "too much instruction time" ratings compared with total ratings obtained.

rank	subject area	total responses obtained	number of "too much time" responsee	% of "too much time" responses
1	Office Practice	91	4	4%
2	Typing	*74	5	7%
3	Business English	98	12	12%
4	Add. Mach. & Calc.	98	28	29%
5	Duplicating Machines	95	33	35%
6	Shorthand & Transcr.	99	42	42%
7	Business Mathematice	97	51	53%
8	Bkpg. & Accounting	95	56	59%
9	Voice Writing Mach.	97	64	66%
10	Business Law	97	71	73%
	totals	941	366	39%

(*) number of responses for Typing thought to be low because of defect in rating scale form; Typing was listed first and without a horizontal line separating it from column headings.

Comparison of Total "Too Little Instruction Time" Ratings With Total Ratings Obtained. As shown in Table 13, even though a given amount of training time was considered wasteful by some respondents for some jobs, the same amount of training was considered inadequate by other respondents for other jobs. Theoretically, the smaller the percentage of "too little time" responses, the more nearly the time allotment for a given subject is as it should be; and, as the percentage of "too little time" responses increases, the more valid the generalization that too little time has been provided for training. Only five per cent of the respondents rated the time allowed for Bookkeeping and Accounting training as insufficient. Subject areas which were more commonly thought to provide inadequate periods of training included: Business English; Office Practice; and Shorthand and Transcription.

Ninety-four per cent of total possible responses concerning time spent in training were "obtained" responses. Of this number, 121 responses, or 13 per cent, indicated training time was too short.

Table 13. Part II Instructional Area Time Allotment Evaluation rank order breakdown showing percentage of total "too little instruction time" ratings compared with total ratings obtained.

rank	subject area	total responses obtained	number of "too little time" responses	% of "too little time" responses
1	Bkpg. & Accounting	95	5	5%
2	Duplicating Machines	95	8	8%
3	Business Law	97	8	8%
4	Add. Mach. & Calc.	98	9	9%
5	Business Mathematics	97	10	10%
6	Voice Writing Mach.	97	10	10%
7	Typing	*74	9	12%
8	Shorthand & Transcr.	99	17	17%
9	Office Practice	91	18	20%
10	Business English	98	27	28%
	totals	941	121	13%

(*) number of responses for Typing thought to be low because of defect in rating scale form; Typing was listed first and without a horizontal line separating it from column headings.

Comparison of Training Time Excesses With Training Time Shortages. One method of determining which courses are allotted appropriate training time is to match excesses against shortages, then making note of the size of the remaining variations, either "long" or "short." Using this procedure, Typing, with a seven per cent "excess" rating and a 12 per cent "shortage" rating would approach an ideal time allotment. At the other extreme, Business Law, with a 73 per cent "excess" rating and an eight per cent "shortage" rating would show a substantial "overage" of "excess time" ratings.

Table 14 is an attempt to rank the various subject areas in accordance with the "time in training" evaluations of employers. Examination of the table will reveal not only the direction of variation from the optimum for each subject area, but the relative amount of variation as well.

Table 14. Part II Instructional Area Time Allotment Evaluation rank order breakdown based upon comparison of training time excesses with training time shortages, as expressed in employer ratings.

rank	subject area	% excess trng. time responses	% short trng. time responses	net % differences
1	Typing	7	12	- 5
2	Office Practice	4	20	-16
3	Business English	12	28	-16
4	Add. Mach. & Calc.	29	9	+20
5	Shorthand & Transcr.	42	17	+25
6	Duplicating Machines	35	8	+27
7	Business Mathematics	53	10	+43
8	Bkpg. & Accounting	59	5	+54
9	Voice Writing Machines	66	10	+56
10	Business Law	73	8	+65

percentages shown are based on total responses obtained.
subject areas are ranked, not according to direction of variation, but according to amounts of net variation.

Seven areas showed net over-use of training time; three areas showed net deficiencies of training time as interpreted by employers who were aware of their job requirements. Subject areas rated as "net short" were much closer to the theoretical optimum than were subject areas rated "net long."

The method of computation used in Table 14 is similar to the "grade point" method discussed on page 108 of this paper in that both involve reduction of several categories to a single score for each section or item.

Occupational Proficiency Rating Scales, Section Analysis. In Part II of the study as was true in Part I, there was thought to be no substitute for an item-by-item analysis of the importance of all items to the positions evaluated. Analyses of the most significant item findings in each section of the Occupational Proficiency Rating Scales are presented later in the body of this paper, and an item-by-item presentation of all results of Part II appears in Appendix G.

Before analyzing the results of Part II on an item-by-item basis, however, it has been thought proper to prepare section-by-section analyses showing which sections were considered by employers to be most important, which sections were considered least important, which sections contained large numbers of items which were well performed, which sections contained large numbers of items which were poorly performed. These interpretations have been thought necessary that each section be accorded its rightful place in curriculum planning and revision.

Comparison of sections as to importance was thought possible through:

- (1) determining which sections of the twelve comprising the Occupational Proficiency Rating Scales were thought most important as evidenced by the percentage relationships which the number of "very important" responses obtained bore to the total response possible;
- (2) determining which sections were thought most important as evidenced by the percentage relationships which the number of "very important" responses obtained bore to the total responses obtained;
- (3) determining which sections contained the highest percentages of "not known" responses, based on total responses possible.

Comparison of sections as to ratings of performance was accomplished by:

- (1) determining in which sections employee performance was best, as evidenced

by a rank order showing percentage relationships of total above average performance responses to total responses possible; (2) determining in which sections employee performance was best, as evidenced by a rank order breakdown of percentage relationships of total above average performance responses to total responses obtained; (3) determining in which sections employee performance was poorest, as evidenced by a rank order of percentage relationships of total below average performance responses to total responses possible; (4) determining in which sections employee performance was poorest, as evidenced by a rank order breakdown of percentage relationships of total below average performance responses to total responses obtained.

Section Comparisons Showing Percentage Relationships of Total "Very Important" Responses to Total Responses Possible. Sections of the Occupational Proficiency Rating Scales which include high percentages of items marked "important" by employers identify competencies and abilities needed on the job. Conversely, sections having only small percentages of items regarded by employers as important would be of lesser concern to educators in helping young people train for entry into business.

It was considered useful to compare the aggregate of "very important" responses for each section with the total responses possible, and to list the various sections in order, by percentage of "very important" responses. Table 15 shows this relationship.

In the Work Habits section of each rating scale there were 28 items. Since 100 returns were summarized, there were 2,800 responses possible. Of this number 1,616, or 58 per cent, were answered in the "very important" category. It might be safely said that employers of recent Haskell Commercial Department graduates regard work habits items included by the writer as

being relatively important to satisfactory performance on the job. Items in the General Characteristics section were marked "very important" in 55 per cent of the possible responses. The highest ranking subject areas, using number of "very important" responses as an index, were Typing, 47 per cent, Business English, 40 per cent. Areas of rather considerable importance included: Personal, 28 per cent; Duplicating Machines, 25 per cent. Areas of modest importance to the jobs held included: Shorthand and Transcription, 16 per cent; Voice Writing, and Bookkeeping and Accounting, 14 per cent each; Adding Machines and Calculators, 13 per cent; Business Mathematics, 11 per cent. In the view of respondents, the questions asked by the Business Law section were relatively unimportant, since only five per cent of the total possible responses were in the "very important" column.

Table 15. Part II Occupational Proficiency Rating Scales section-by-section rank order breakdown showing percentage relationships of total "very important" responses to total responses possible.

rank	scale	total responses possible*	no. of "very imp." responses	% of "very imp." responses#
1	Work Habits	2,800	1,616	58%
2	General Charac.	2,800	1,550	55%
3	Typing	1,200	560	47%
4	Business English	1,800	715	40%
5	Personal	1,300	373	28%
6	Duplicating Machines	1,300	323	25%
7	Shorthand & Transcr.	1,000	161	16%
8	Voice Writing Mach.	200	29	14%
9	Bkpg. & Accounting	1,700	243	14%
10	Add. Mach. & Calc.	500	42	13%
11	Business Mathematics	1,500	160	11%
12	Business Law	1,000	48	5%
	totals	17,100	5,820	34%

(*) determined for each section by multiplying the number of items in that section by 100, the number of employees evaluated.

(#) of total responses possible.

Section Comparisons Showing Percentage Relationships of Total "Not Important" Responses to Total Responses Possible. Another method of establishing the relative importance of the various sections, as evidenced by employer evaluations, is to divide the number of "not important" responses obtained for each section by the total responses possible, then organizing the results on a rank order basis. Presumably, a low percentage of "not important" responses indicates general section importance, and a high percentage of "not important" responses would identify a section as less important than those with which it is compared.

Table 16, prepared on the basis of "not important" response frequency, lists the twelve scales in order, from lowest percentage of "not important" responses, indicating high relative section importance, to highest percentage of "not important" responses, indicating low relative section importance.

Of the 2,800 responses obtainable in the Work Habits section, only five per cent were recorded as not important. The General Characteristics section was also regarded as very important, using the infrequency of not important responses as a criterion. Business Law, as a section, was rated relatively unimportant, for 82 per cent of its total possible responses were registered in the "not important" column. In addition to Business Law, sections which included items answered as "not important" by over half the respondents were: Bookkeeping and Accounting, 72 per cent; Business Mathematics, 66 per cent; Voice Writing, 64 per cent; Adding Machines and Calculators, 62 per cent; and Shorthand and Transcription, 56 per cent. Typing was considered the most important skill subject section, but 18 per cent of the total possible responses were answered in the "not important" column even for that subject.

It was thought interesting to note how relatively important, in the eyes of employers of recent Haskell Commercial graduates as they reflected upon the requirements of their employees' positions, were the three non-subject sections: Work Habits; General Characteristic; Personal Characteristic.

Table 16. Part II Occupational Proficiency Rating Scale section-by-section rank order breakdown showing percentage relationships of total "not important" responses to total responses possible.

rank	scale	total responses possible*	no. of "not impt." responses	% of "not impt." responses#
1	Work Habits	2,800	153	5%
2	General Charac.	2,800	179	6%
3	Typing	1,200	213	18%
4	Personal	1,300	241	19%
5	Business English	1,800	345	19%
6	Duplicating Machines	1,300	564	43%
7	Shorthand & Transer.	1,000	555	56%
8	Add. Mach. & Calc.	500	312	62%
9	Voice Writing Mach.	200	129	64%
10	Business Mathematics	1,500	997	66%
11	Bkpg. & Accounting	1,700	1,232	72%
12	Business Law	1,000	824	82%
	totals	17,100	5,744	34%

(*) determined for each section by multiplying the number of items in that section by 100, the number of employee positions evaluated.

(#) of total responses possible.

It is interesting to note that, for all sections, the same per cent of total possible responses was registered for "not important" as for "very important" answers.

Section Comparisons Showing Percentage Relationships of Total Performance Not Known Responses to Total Response Possible. It was thought that a better idea as to the relative importance of the various sections could be obtained by dividing the total responses possible for a section into the number

of "performance not known" responses, then ranking the sections according to the resulting percentages. The usefulness of such a comparison rests on the writer's assumption that an employer is more apt to utilize a performance "not known" column for items which he considers unimportant to the position filled by a rated employee. A rater would seldom enter a "not known" response for a performance item which he considered important; items considered important ordinarily have involved conscious employer review of employee performance.

Table 17, prepared on the basis of "not known" response frequency, lists the twelve scales in order from the lowest per cent to highest. The table clearly shows that the Work Habits and General Characteristics sections included few items for which employers did not identify performance levels. On the other hand, of the thousand possible responsee for Business Law, more than four-fifths were checked "not known," indicating relative unimportance of the section so far as satisfactory job performance was concerned. The skill subject areas for which performance levele were beet known were Business English and Typing. Of the 1,000 responses possible in Shorthand and Transcription, half were entered as "not known." Sections which included even larger percentages of not known reponses included: Adding Machines and Calculators, Voice Writing, Business Mathematics, and Bookkeeping and Accounting.

Table 17. Part II Occupational Proficiency Rating Scales section-by-section rank order breakdown showing percentage relationships of total "performance not known" responses to total responsee possible.

rank	scale	total responses possible*	no. of "not known" responsee	% of "not known" responses
1	Work Habite	2,800	41	1%
2	General Charac.	2,800	46	2%
3	Business English	1,800	121	14%
4	Typing	1,200	188	16%
5	Personal	1,300	313	24%
6	Duplicating Machines	1,300	576	44%
7	Shorthand & Transcr.	1,000	501	50%
8	Add. Mach. & Calc.	500	292	58%
9	Voice Writing	200	124	62%
10	Business Mathematice	1,500	973	65%
11	Bkpg. & Accounting	1,700	1,185	70%
12	Business Law	1,000	812	81%
	totals	17,100	5,172	30%

(*) determined for each section by multiplying the number of items in that section by 100, the number of employee positions evaluated.

Section Comparisons Showing Percentage Relationships of Total Above Average Performance Responses to Total Responses Possible. It has been thought important, for purposes of curriculum evaluation and improvement, to identify those sections for which employer ratings indicate total performance was best and those in which overall performance has been poorest. For purposes of determining which sections have represented best performance, the totals of "outstanding" and "very good" performance columns have been added together and called "above average performance" responsee. Ranking of sections as to performance levels was accomplished by dividing the total of "above average" responses for each section by the total responsee possible.

As seen in Table 18, the Work Habite section heads the performance list,

with 57 per cent of the 2,800 possible responses having been recorded as representing above average performances. Performances in all three non-subject sections excelled that of all nine subject-area sections, using the total of above average performance responses as a criterion. Each section recorded at least ten per cent above average performance responses except Business Law, for which three per cent of the 1,000 possible answers represented above average performances. Of the aggregate 17,100 responses possible in all sections, the all sections total of above average responses was 5,695, or 33 per cent.

Table 18. Part II Occupational Proficiency Rating Scales section-by-section rank order breakdown showing percentage relationships of total "above average performance" responses to total responses possible.

rank	scales	total responses possibles#	no. of "above av." responses*	% of "above av." responses
1	Work Habits	2,800	1,600	57%
2	General Charac.	2,800	1,339	48%
3	Personal	1,300	616	47%
4	Typing	1,200	480	40%
5	Business English	1,800	644	36%
6	Duplicating Machines	1,300	358	28%
7	Add. Mach. & Calc.	500	90	18%
8	Shorthand & Transcr.	1,000	172	17%
9	Business Mathematics	1,500	176	12%
10	Ekpg. & Accounting	1,700	174	10%
11	Voics Writing Mach.	200	20	10%
12	Business Law	1,000	26	3%
	totals	17,100	5,695	33%

(#) including "not known" responses.

(*) section summations of "outstanding" plus "very good" performance responses.

Section Comparisons Showing Percentage Relationships of Total Above Average Performance Responses to Total Responses Obtained. While it was

thought useful to show the ranking of sections based on per cents found by dividing "above average" responses by total responses possible, it was felt that greater accuracy would be achieved through using total responses obtained as a denominator, rather than using total responses possible. Table 19 lists in rank order the section per cents found by relating total above average responses obtained to total responses obtained.

Sixty-five per cent of the 945 Personal Section responses given were above average responses. Fifty-eight per cent of the 2,736 Work Habits responses obtained were above average responses. Other sections for which above average answers constituted more than half the responses obtained were: Duplicating Machines, 55 per cent; and Adding Machines and Calculators, 51 per cent. One-fifth of the aggregate of Business Law responses received were in the above average classifications. Although two-thirds of the sections rated below the 50 per cent above average mark, an even 50 per cent of the 11,361 obtained responses for all sections indicated performance of better than average quality.

The section average of "above average" responses using total responses possible as a base was 33 per cent. The section average of "above average" responses using total responses obtained as a base was 50 per cent.

Sections for which there were relatively few unanswered performance responses show little percentage change as between use of total responses possible or total responses obtained as the denominator. However, several sizeable percentage increases were noted: Voice Writing, from ten per cent to 43 per cent; Bookkeeping and Accounting, from ten per cent to 28 per cent; Duplicating Machines, from 28 per cent to 55 per cent; Business Mathematics,

from 12 per cent to 36 per cent; Adding Machines and Calculators, from 18 per cent to 51 per cent; Shorthand and Transcription, from 17 per cent to 36 per cent; Personal, from 47 per cent to 65 per cent.

Table 19. Part II Occupational Proficiency Rating Scales section-by-section rank order breakdown showing percentage relationships of total above average performance responses to total responses obtained.

rank	scale	total responses obtained#	no. of "above av." responses*	% of "above av." responses
1	Personal	945	616	65%
2	Work Habits	2,736	1,600	58%
3	Duplicating Machines	650	358	55%
4	Add. Mach. & Calc.	177	90	51%
5	General Characteristics	2,742	1,339	49%
6	Typing	987	480	49%
7	Voice Writing Machines	46	20	43%
8	Business English	1,521	644	42%
9	Bkpg. & Accounting	461	174	38%
10	Business Mathematics	493	176	36%
11	Shorthand & Transcr.	475	172	36%
12	Business Law	128	26	20%
	totals	11,361	5,695	50%

(#) excluding "performance not known" responses.

(*) section summations of "outstanding" plus "very good" performance responses.

Section Comparisons Showing Percentage Relationships of Total Below Average Performance Responses to Total Responses Possible. For purposes of summarization, totals in each section for performance which was rated "barely satisfactory" and "not satisfactory" have been added together and called "below average performance." By dividing the total of "below average performance" responses for each section by the respective total answers possible for those sections, it was possible to arrange a rank ordering of per cents, with sections showing the smallest per cents of poor performance

listed first. This has been done in Table 20.

Of the 1,300 possible responses concerning Duplicating Machines performance, only one per cent indicated performance of below average quality. At the other extreme, 12 per cent of the 2,800 possible responses for the General Section were in below average columns. Of the 17,100 responses possible for all sections a total of 1,039 answers, or six per cent, showed less than average performance, based on the opinions of employers.

Table 20. Part II Occupational Proficiency Rating Scales section-by-section rank order breakdown showing percentage relationships of total below average performance responses to total responses possible.

rank	scale	total responses possible#	no. of "below av." responses*	% of "below av." responses
1	Duplicating Machines	1,300	18	1%
2	Add. Mach. & Calc.	500	12	2%
3	Business Mathematics	1,500	41	3%
4	Bkpg. & Accounting	1,700	54	3%
5	Personal	1,300	42	3%
6	Business Law	1,000	34	3%
7	Voice Writing Mach.	200	7	4%
8	Typing	1,200	64	5%
9	Shorthand & Transcr.	1,000	68	7%
10	Work Habits	2,800	228	8%
11	Business English	1,800	149	8%
12	General Characteristics	2,800	322	12%
	totals	17,100	1,039	6%

(#) including "not known" responses.

(*) section summations of "barely satisfactory" plus "not satisfactory" performance responses.

Section Comparisons Showing Percentages Relationships of Total Below Average Performance Responses to Total Responses Obtained. The most accurate presentation of section statistics concerning below average performance was achieved by dividing total responses obtained for a section into the

number of "below average performance" responses for that section. As shown in Table 21, of the total of 11,361 performance responses obtained for all sections, 1,039 or nine per cent represented less than average performance. Sections which had the smallest percentages of inferior performance evaluations were: Duplicating Machines, Personal Characteristics, and Typing. Sections which had the poorest record of performance were: Shorthand and Transcription, General Characteristics, and Bookkeeping and Accounting. The last named sections were the only ones whose poor performance averages exceeded the average of all sections combined.

Table 21. Part II Occupational Proficiency Rating Scales section-by-section rank order breakdown showing percentage relationships of total below average performance responses to total responses obtained.

rank	scale	total responses obtained#	no. of "below av." responses*	% of "below av." responses
1	Duplicating Machines	650	18	3%
2	Personal	945	42	4%
3	Typing	987	64	6%
4	Voice Writing Mach.	46	3	7%
5	Add. Mach. & Calc.	177	12	7%
6	Business Mathematics	493	41	8%
7	Work Habits	2,736	228	8%
8	Business Law	128	11	9%
9	Business English	1,521	137	9%
10	Bkpg. & Accounting	461	54	12%
11	General Characteristics	2,742	322	12%
12	Shorthand & Transcr.	475	68	14%
	totale	11,361	1,039	9%

(#) excluding "not known" responses.

(*) section summations of "barely satisfactory" plus "not satisfactory" performance responses.

Table 21, which shows the areas needing most improvement, is probably the most useful table presented in terms of pointing toward curriculum change.

Occupational Proficiency Rating Scales Item Analysis. Statements of findings concerning each of the twelve sections which comprise the Occupational Proficiency Rating Scales are given below. Only extreme items, conditions and relationships are commented upon in the body of this report. Complete presentations of results in raw form may be found in Appendix G.

Each section has been analyzed with reference to: (1) items regarded as being most important; (2) items regarded as being least important; (3) items least well known; (4) items for which performance was most satisfactory; (5) items for which performance was least satisfactory. Section rankings, showing all items in each section listed on each of the five bases just mentioned, are given in Appendix L.

The first three analytical approaches listed above have been thought useful for determining what items should be retained, added to, dropped from, or incorporated into some phase of the training program. It has been thought that: items considered important, as evidenced by employer evaluations, should be included in curricular offerings; items thought to be relatively unimportant might be relegated to places of lesser importance in curriculum planning, or displaced altogether; items not at all well known by employers and supervisors strongly infer a relative lack of importance in positions occupied by rated graduates and might be treated accordingly.

The fourth and fifth analytical approaches listed above were thought to be guideposts toward eliminating deficiencies of quality and, to a lesser extent, quantity, in the commercial curriculum. More specifically, it has been thought that duties poorly performed should be taught more efficiently and/or for longer periods of time in the training program.

The General Characteristics Section. The "Dependability, reliability" item was considered by employers to be of utmost importance. Ninety-two per cent of total possible responses for the item were placed in the "very important" category. Other items, each of which tallied 70 per cent or higher in the "very important" classification included: attendance regularity; cooperativeness, helpfulness; common sense, judgment; alertness, intelligence, analytical ability; honesty, integrity, character; adaptability; and courtesy, manners, etiquette. Such evaluations demanded that the named characteristics be considered essential in general training.

Almost half of the total possible responses indicated that "leadership abilities" were not important in the positions held by rated employees. The only other general characteristic which was considered "not important" by as many as one-fourth of the respondents was "physical quickness, mobility, agility." Other items that received relatively high percentages of "not important" responses were: self-expression, extroversion, assertiveness; creativeness, imagination; and sense of humor.

The item in the General Characteristics section which was least well known was leadership abilities, dominance, for which "not known" responses registered 18 per cent of total responses possible. As was commonly noted in all sections, the items having the highest percentages of "not important" responses often had the highest percentages of "not known" responses, also. Apparently, employers did not bother to observe characteristics which were not vital to the successful performance of their employees' jobs. Nine of the one hundred respondents indicated that they were unable to rate their employees as to creativeness, imagination.

There was a strong inference, shown by comments inserted in several cases, that the trait was not evaluated because, so far as the rated employee was concerned, it did not exist. If such were the case the correct answer would have been "unsatisfactory" instead of "not known."

General Characteristics items which showed the best employee performance, with per cents of above average responses indicated, were: honesty, 72 per cent; cooperativeness, 66 per cent; morals, 65 per cent; courtesy, 64 per cent; respect for authority, rights, and property, 64 per cent; and cheerfulness, 62 per cent.

Information which would be most useful, directly, in curriculum improvement, had to do with items for which performance was least satisfactory. The General Characteristics items which received the largest percentages of below average responses included: self-expression, extroversion, assertiveness, 27 per cent; enthusiasm, spirit, zeal, 23 per cent; leadership, 21 per cent; initiative, eagerness to accept responsibility, 20 per cent; desire for self-improvement and promotion, 19 per cent; self-confidence, self-reliance, 19 per cent; friendliness, ease in meeting people, 18 per cent; creativeness, imagination, 18 per cent.

The Personal Section. Cleanliness was the Personal Section item which received the greatest number of "very important" responses, 68. Other items of high importance were: grooming of hair, hands, and face, 58 per cent; overall personal appearance, 50 per cent. Employers placed a relatively high importance on adequate sleep, and on taste in clothing and accessories.

The Personal item which was regarded as least important was "has a church affiliation," to which 40 of one hundred respondents indicated that

the answer was "not important." Other items regarded as relatively unimportant, with percentages of "not important" responses shown, were: makes wise use of leisure time, 36 per cent; is thrifty, buys wisely, 35 per cent; trimness of figure, weight, 32 per cent; posture, gracefulness of movement, 29 per cent. It should be noted that some items considered relatively unimportant by employers might be considered highly important by ministers, physicians, and others. It has been the writer's view that, although the curriculum should be developed with employer criteria in mind, there are other very important curriculum determiners as well.

A number of "personal" items were not well known by the raters. Fifty-three answers to the item concerning wholesome foods and proper diet were "not known" responses. Other items about which relatively little was known included: is thrifty, buys wisely, 52 per cent; makes wise use of leisure time, 51 per cent; has a church affiliation, 49 per cent; gets adequate sleep, 44 per cent. It has been the writer's suggestion that employers might be more concerned about and aware of the named items if employee performance were to become quite poor because of one of the listed factors.

Personal Section items for which performance was above average included: cleanliness, with 85 of one hundred responses showing "outstanding" or "very good" performance; overall personal appearance, 78 per cent; grooming of hair, hands, and face, 77 per cent; taste in clothing and accessories, 68 per cent; trimness of figure, weight, 63 per cent.

The number of below average responses in the Personal section was quite small. Six per cent of the total responses possible suggested poor posture and lack of gracefulness in movement. Five per cent of the responses showed housing to be inadequate.

The Work Habits Section. Ninety-one of the 100 returns showed the "follows directions, both oral and written" item as "very important." Other items which received more than 80 per cent very important responses were: punctuality, arrives at work on time, prompt; and works accurately, takes pride in perfection. The following items each received more than 70 "very important" votes: asks relevant questions when necessary; likes work, especially detail work; establishes and meets work completion deadlines; has a good attitude toward supervision.

Whether or not employees annoyed others with smoking or gum chewing was of little consequence to one-fourth of the respondents. One-fifth of the raters indicated that employees' volunteering for late work was not important to the positions held. One-eighth of the responding group stated that it was irrelevant whether employees sought special treatment or favors.

The item in the Work Habits section which was least well known was "willingly volunteers late work when needed," for which 16 responses were shown as "not known." Six raters indicated they did not know whether their employees anticipated supervisory requests. Four per cent indicated lack of knowledge as to how well the rated employee was liked by other employees, and three per cent did not know how well the rated employee liked other employees.

Employee performance was rated above average by more than 80 per cent of the respondents for the "chewing gum" and "smoking" items. Seven other items for which the ratings were outstanding or very good in at least 60 per cent of the returns were: is liked by other employees; does not seek special treatment or favors; avoids time loss caused by extended lunch

periods; punctuality, arrives at work on time, prompt; avoids time loss caused by personal business and phone calls; avoids time loss caused by friends dropping in; has a good attitude toward supervision.

The most serious employee deficiency was noted in the work accuracy item, for which 18 responses were in the below average class. Seventeen per cent of the raters noted inadequacies as to employee organization of work and budgeting of time. One-eighth or more of the respondents regarded each of the following items as needing improvement: generally works rapidly; accepts criticism gracefully and complies; can "overproduce" in emergency situations; anticipates supervisory requests; does not need close supervision.

The Typing Section. Of the 12 items in the Typing Section, the "typing accuracy--straight copy" item was most frequently rated "very important." Proofreading accuracy was rated almost as important, with 70 "very important" responses. Other items shown to be important included: typing accuracy--numbers, tabular, etc., 66 per cent; erasing ability, 52 per cent; and arrangement of work, 49 per cent.

The item which was by far the least important was "chain feeding ability," which was rated "not important" by 56 of the 100 ratings. Other items shown to be relatively unimportant, as indicated by the frequency of "not important" responses, included: overall typing productivity, electric, 29 per cent; typing speed, numbers, tabular, etc., 20 per cent; overall typing productivity, manual machines, 18 per cent; and typing speed, straight copy, 17 per cent.

The chain feeding ability item was not only unimportant, it was least well known. Fifty-five respondents indicated they had no knowledge as to

employee competence in this skill. Other items which were least well known included: overall typing productivity, electric, 24 per cent; overall typing productivity, manual machines, 20 per cent; typing speed, numbers, 15 per cent; and typing speed, straight copy, 14 per cent.

The typing skills which received the greatest numbers of above average performance ratings included: typing speed, straight copy, 49 per cent; overall typing productivity, manual machines, 47 per cent; typing accuracy, straight copy, 46 per cent; machine maintenance, 46 per cent; typing accuracy, numbers, tabular, etc., 44 per cent.

Employer responses to the proofreading accuracy item showed a definite weakness in employee performance; 16 ratings were in the below average columns for that item. Ten per cent of the total possible responses showed below average performance in typing accuracy, straight copy. Need for improvement was shown for the following additional items: erasing ability, nine per cent; proofreading speed, eight per cent; typing accuracy, numbers, tabular, etc., five per cent.

The Shorthand and Transcription Section. Of the 10 items in this section, transcription accuracy received the greatest number of "very important" responses, 39. Overall shorthand-transcription production was considered very important by 29 raters. Each of the following items was marked very important by 19 raters: familiarity with common terms and jargon; shorthand writing speed; ability to transcribe from "cold" notes.

Half the items named in the Shorthand and Transcription section each received 50 or more "not important" ratings: takes notes in non-office setting, 86; ability to write shorthand notes so that others may transcribe

therefrom, 80; ability to transcribe notes of others, 77; non-interruption of dictator, 52; ability to transcribe from "cold" notes, 50.

Performance levels for three of the items in the section were not at all well known by the raters. "Not known" percentages were: takes notes in non-office setting, 78 per cent; ability to write shorthand notes so that others may transcribe therefrom, 72 per cent; ability to transcribe notes of others, 71 per cent.

Shorthand and Transcription Section items for which performance was the most satisfactory, with numbers of above average responses indicated, were: non-interruption of dictator, 27; overall shorthand-transcription production, 26; shorthand writing speed, 25; transcription accuracy, 22; transcription speed, 21.

Shorthand and Transcription Section items for which performance was the least satisfactory, with the percentage of below average responses indicated, were: transcription accuracy, 12 per cent; overall shorthand-transcription production, 11 per cent; shorthand writing speed, and transcription speed, 10 per cent each; and ability to transcribe from "cold" notes, eight per cent.

The Voice Writing Section. Since the Voice Writing scale was so small, including only two items, tabulation was really not necessary. Operation of voice writing machines, with 13 very important responses, was considered slightly less important than was typing production from voice source, which had 16 such responses. "Not important" responses numbered 64 and 65, respectively, for the above items. Neither item was well known. There were 61 "not known" responses for operation of machines, and 63 "not known"

responsee for typing production from voice sources.

Above average performance was indicated by 10 such responses for each of the two items. The second item received three "outstanding" responses. Operation of voice writing machines was given four barely satisfactory ratings, and typing production from voice sources received three.

The Business English Section. Five items were rated "very important" by at least half of the respondents. These items, and their response frequencies, were: punctuates, capitalizes, abbreviates properly, 69; spells well, 69; uses proper English in writing, 58; filing skills, 57; has a good writing vocabulary, 50. Another important item was "uses telephone capably," for which 48 of the 100 responses were in the "very important" classification.

One item in the English section received a very high percentage of "not important" responses: ability to read land description maps, with 81 per cent. Other items which the raters identified as relatively unimportant were: competence in telegram composition, 48 "not important" ratings; functions well as receptionist or guide, 30; penmanship, 28; can compose a good memo or business letter, 24.

With the exception of penmanship, the items listed in the paragraph above were not only regarded as relatively unimportant, but were identified as the least well known. Frequency of "not known" responses for the items was: ability to read land description maps, 77; competence in telegram composition, 47; functions well as receptionist or guide, 26; can compose a good memo or business letter, 26.

The English skills which received the greatest numbers of above average performance ratings included: has a pleasing voice and manner, 52; perman-ship, 52; spells well, 46; use of proper English when speaking, 43; overall speaking ability, 41; filing skills, 40.

Among the 18 items listed, the one which received the largest number of below average performance responses was "speaks loudly enough to be heard," with 17. The performance for each of two items was rated below average by 16 of the 100 respondents: has good eye contact, at ease when speaking; can compose a good memo or business letter. The performance for each of three other items was rated below average by 10 respondents: func-tions well as receptionist or guide; uses proper English in writing; has a good speaking vocabulary.

The Bookkeeping and Accounting Section. Of the 17 items in the Book-keeping and Accounting section, two were rated "very important" by as many as one-fourth of the respondents: understanding of simple records, 30; accuracy in doing bookkeeping and accounting, 29. Other items which re-ceived relatively high percentages of "very important" ratings were: abil-ity to post rapidly and accurately, 23; general bookkeeping and accounting proficiency, 19; understanding of complex records, 18.

Five items in the section were marked "not important" by at least four-fifths of all respondents: reconciliation of bank statements, 90 per cent; preparation of bank checks and stubs, 89 per cent; proficiency in tax account-ing, 84 per cent; computation of accounts receivable and payable, 81 per cent; and preparation of statements of account, 81 per cent.

The five items just named, and two additional ones, received large numbers of "not known" responses: reconciliation of bank statements, 88; preparation of bank checks and stubs, 87; proficiency in tax accounting, 84; computation of accounts receivable and payable, 78; preparation of financial statements, 78; preparation of statements of account, 78; proficiency in payroll accounting, 78.

The bookkeeping and accounting items which were rated as best performed were: understanding of simple records, 21 above average performance responses; general bookkeeping and accounting proficiency, 17; accuracy in doing bookkeeping and accounting, 15; ability to post rapidly and accurately, 14; understanding of complex records, 13.

Items for which performance was rated least satisfactory, with their below average percentages were: ability to analyze business transactions and to journalize same, nine per cent; understanding of complex records, nine per cent; accuracy in doing bookkeeping and accounting, five per cent; and understanding of the bookkeeping cycle, five per cent.

The Business Mathematics Section. Arithmetic accuracy was the Business Mathematics Section item which received the greatest number of "very important" responses, 29. Other items which were more frequently marked as very important than were others included: overall business arithmetic production, 19; decimal point usage, 15; knowledge of the four basic arithmetical processes, 14; computation of percentage, 13.

Four Mathematics section items were rated "not important" by four-fifths or more of all respondents: depreciation computation, 92 per cent; computation of interest, 88 per cent; computation of discount periods and

discounts, 86 per cent; preparation of graphs, and understanding same, 82 per cent.

The same four items also received the highest percentages of "not known" responses: depreciation computation, 86; preparation of graphs, 82; computation of interest, 82; computation of discount periods and discounts, 80. Employee performance for the ratios item was also not well known by employers, with 79 responses so indicating.

Mathematics items which received the largest numbers of above average responses were: numbers permanship, 39; arithmetic accuracy, 22; overall business arithmetic production, 19; knowledge of the four basic arithmetical processes, 15; and decimal point usage, 14.

Mathematics items for which performance was least satisfactory, as indicated by the relative frequency of below average responses: ratios, knowledge and use of, 6; fractions, knowledge and use of, 5; ability to do abstract reasoning, 5.

The Business Law Section. Relatively few respondents considered the items listed in the Business Law section important to the positions held by their rated employees. The item "overall knowledge of business law" was marked "very important" by only eight respondents. Four items were each rated "very important" by seven raters. Those items were: knowledge of negotiable instruments law; knowledge of employer-employee legal relations; knowledge of motor vehicle laws; knowledge of elementary contract law.

Business Law items received extremely high percentages of "not important" responses, as the preceding paragraph would suggest. The following items were thought unimportant by at least four-fifths of all respondents:

knowledge of buyer-seller legal relations, 83 per cent; knowledge of the law of business organization, 86 per cent; knowledge of elementary insurance law, 86 per cent; knowledge of debtor-creditor relations, 84 per cent; and knowledge of negotiable instruments law, 84 per cent.

The items which received the largest number of "not important" responses also received the largest number of "not known" responses. The per cent of "not known" ratings were as follows: knowledge of elementary insurance law, 85; knowledge of buyer-seller legal relations, 83; knowledge of elementary property law, 83; knowledge of the law of business organization, 83; knowledge of negotiable instruments law, 82; knowledge of debtor-creditor relations, 82.

Since large percentages of Business Law responses were in the "not important" and "not known" categories, the performance percentages were relatively low. Only five respondents indicated that the performance in the "knowledge of debtor-creditor relations" item was above average. Other above average item totals were as follows: knowledge of motor vehicle laws, four; knowledge of employer-employee legal relations, three; knowledge of negotiable instruments law, three; knowledge of the law of business organization, three.

The items for which performance was rated least satisfactory were as follows: knowledge of motor vehicle laws, five per cent of all respondents; knowledge of elementary property law, four; overall knowledge of business law, four; knowledge of the law of business organization, four.

The Adding Machines and Calculators Section. There were only five items in this section. The items considered by employers to be most important

were: skilled operation of ten-key adding listing machine, with 23 "very important" responses; and ability to change tapes, change ribbons, and make minor repairs, having 21 "very important" answers.

Large percentages of "not important" responses were obtained for some of the items, including: skilled operation of rotary calculating machine, 81 per cent; skilled operation of key-driven calculator, 77 per cent; and skilled operation of full-keyboard adding listing machine, 74 per cent.

The three items receiving the most "not known" responses were: skilled operation of rotary calculating machine, 74 per cent; skilled operation of full-keyboard adding listing machine, 70 per cent; and skilled operation of key-driven calculator, 69 per cent.

The items for which the largest numbers of above average responses were obtained were: ability to change tapes, change ribbons, make minor repairs, 35 per cent; and skilled operation of ten-key adding listing machine, 29 per cent.

Performance was regarded as least satisfactory in the skilled operation of key-driven calculators, which registered five below-average answers.

The Duplicating Machines Section. Of the 13 items in the scale, the following were most frequently marked "very important": assembles duplicated work neatly and in proper order, 38; does not waste stencils, masters, or paper, 35; makes good corrections on stencils, 34; cutting of ink-type duplicating stencils, 33; turns out clean, attractive, unsmudged work, 32.

The following items were shown to be of least importance, with per cents of "not important" responses indicated: operation of ink-type duplicating machine, 55 per cent; operation of spirit-type duplicating machine,

55 per cent; operation of photostatic copier, 49 per cent; makes good corrections on spirit masters, 48 per cent; keeps machines clean and in good condition, 47 per cent.

Duplicating Machines Section items, the performance of which was least well known by respondents included: use of drawing board, stylus, and plate in stencil preparation, with 67 "not known" responses; operation of spirit-type duplicating machine, 58; operation of ink-type duplicating machine, 57; make good corrections on spirit masters, 51; operation of photostatic copier, 50.

Four of the duplicating machines items each received above average performance responses from one-third or more of the raters: keeps self and clothes clean in operation, 40; assembles duplicated work neatly and in proper order, 39; turns out clean, attractive, unsmudged work, 36; cutting of ink-type duplicator stencils, 34.

No item received more than three responses indicating below average performance on duplicating machines. The four items for which performance was least satisfactory were: operation of ink-type duplicating machine, three per cent; does not waste stencils, masters, or paper, three per cent; operation of spirit-type duplicating machine, two per cent; use of drawing board, stylus, and plates in stencil preparation, two per cent.

Results Obtained From the Occupational Proficiency Rating Scales General Information Sheet. Of the 100 employees evaluated in Part II of the study, 79 were still employed by the raters at the time the rating scale forms were completed. The other 21 had been employed for sufficient periods of time to warrant evaluation, but were no longer employed by the rating offices at the time of rating.

Only 16 of the employees rated were evaluated by industrial and private business employers. The federal government employed 79 of the 100 employees during the period of time on which ratings were based. Three of the graduates were rated in Indian-connected, non-government jobs. The remaining two employees held state and local government positions.

The validity of Part II results depends substantially upon the sufficiency of the periods of employment upon which employer observations were based. The 100 employees rated had been employed, on the average, for a period of 20 months by the evaluating organization. However, because of promotions and within-organization job changes, the average tenure in positions evaluated was one year and three months. Rated members of the Class of 1959, the most recently employed group, had been working for the evaluating employers an average of one year at the time the ratings were made. Because of promotions and within-organization job changes, evaluations of 1959 graduates were based on a "time in present position" average of ten months.

The periods of time on which evaluations were made would seem ample to warrant considerable credence being given the results obtained. Other data contained in the general questionnaire form included with the Part II rating scale forms have not been tabulated for this presentation.

Summary of Methods of Analysis. Each of the rating scales used has been analyzed in various ways, involving a good deal of seemingly needless repetition. Comparisons have been made first with reference to total number of answers possible, then with reference to total number of answers obtained. Comparison with total number of answers obtained would seem the fairest, but might not be the most productive in terms of evaluation for curriculum improvement.

One very accurate method of determining results would be the use of a "grade point" system of measurement, whereby numerical values would arbitrarily be assigned to the response categories. Under such a plan the computation of individual subject area scores and rankings on the Estimate of Instructional Efficiency would be as follows:

Arbitrarily assign, for example, a value of one to each "outstanding" rating; assign each "very good" rating a value of two, each "average or satisfactory" rating a value of three, and so on. Assign no value to responses not given, nor to "no estimate" responses. Multiply the frequencies in each of the five rating columns times the assigned value per response. Total these products and divide that sum by the number of responses which were included on that subject line within the five columns. Numerical scores could then be ranked and reinterpreted into descriptive phrases or letter grades. This method is similar to that used by colleges and universities in computing grade point averages of students. The method could be used for tabulation of results for each of the scales, including the Occupational Proficiency Rating Scales, which would require one computation as to importance and another as to performance for each scale. Such a method has the advantage of interpreting all responses for a given subject area or item

in a single score. While the "grade point method" of computation is extremely accurate, it was thought that, for purposes of this study, the identification of extremes would be more productive.

CHAPTER VI

SUMMARY: CONCLUSIONS AND RECOMMENDATIONS

Conclusions: Part I

Extent to Which Office Practice Purposes Have Been Met. Although not previously mentioned as a specific objective of Part I of the study, a logical starting place for the summarization of the preliminary survey is the drawing of conclusions as to whether the objectives of the Office Practice training program have been achieved. Part I of the study has provided information which is the proper basis for such conclusions.

The purposes of the office practice program are stated in Appendix C. One of the purposes of the training has been to give the students an opportunity to apply knowledge acquired in the classroom to actual office situations. Part I results showed that several subject areas of training had not been utilized in office practice; even in the subjects or skills which were used, there was considerable evidence of non-usage.

Students have been given the opportunity to work under the supervision of employees other than their classroom teachers; therefore, the second stated purpose has been fairly well met, but it is believed that one period a day for nine weeks may not have been an optimum amount of time for orientation to supervision.

If the office practice training program has provided bases for remedial work by teachers, there likely has not been sufficient communication between supervisors and teachers to accomplish the objective. The supervisors have rated office practice students each quarter, but practice has indicated that utilization of those evaluations has been very limited. Remedial work for

that one-fourth of the graduating class assigned to office practice during the final school quarter has always been impossible, since ratings are not prepared until the end of the school year.

The program, it is thought, has done a reasonably good job of acquainting the students with day-to-day operation of an office, with the possibly serious shortcoming that a single period near the end of the day might not provide a representative cross-section of the entire day's office routine. Interviews with some of the supervisors indicated a strong belief that the amount of training time should in some way be increased. One rater suggested that the program be maintained on a half-day basis; another firmly urged that training should be on a full work-day basis, even if possible only for a rather limited number of days.

The importance which rating supervisors have attached to the general, personal, and work habits sections of the rating scales shows that the program may be teaching students the importance of good personal characteristics as well as technical knowledge.

Conclusions with Regard to Office Practice, Based on the Preliminary Study. The following conclusions seemed justified as a result of this investigation:

1. The office practice program at Haskell Institute makes little or no application of much of the training received in certain skill and subject areas.
2. There is considerable evidence suggesting that the amount of time spent in office practice is inadequate.
3. Office practice supervisors feel little competence in being able to judge the performance or training of their office practice students.

4. Since, in the expressed opinion of supervisors, training needed for satisfactory office practice performance is much less than that required in the commercial curriculum, it would seem desirable to survey employers of graduates to determine whether a like disparity exists in real employment situations between training provided and training thought by employers to be necessary or adequate.

5. Most office practice supervisors appear to be sincerely interested in assuming some responsibility for the training of the commercial students who are under their supervision.

6. In spite of certain obvious and other subtle weaknesses which now exist, the office practice program is serving a useful function and continuation of the program is justified, even if needed improvements cannot be made.

7. Both students and office practice supervisors derive benefit from the program—the former in experience and instruction, and the latter in clerical assistance; but both could derive even greater benefit from an extension of the amount of time spent daily in the program.

8. Office practice supervisors, by both written comment and interview during the conduct of Part I, have indicated that the following outcomes would proceed from the lengthening of the daily office practice training program time to, say, two hours daily, one-half day, or a full day:

a. Students would see a larger cross-section of the clerical duties of offices to which they are assigned.

b. Students would acquire some adeptness in a larger variety of clerical tasks.

c. Supervisors would learn to know the students better, would be able to judge their work more competently, would be

able to offer more specific criticism and suggestions to students and teachers.

d. Supervisors would be able to assign rather large tasks to the student, not merely piecemeal jobs to be completed in a short time.

e. The tasks suggested by items b and d above would call for the student to utilize training in certain subject areas where office practice experience is not at present practicable.

Although not specifically stated by the supervisors, the writer would also add the following probable results of an increase in office practice training time:

f. Students would observe their supervisors in a variety of moods, facing an assortment of problems, and would better learn to adjust to the vagaries of supervisory behavior.

g. Supervisors, who would receive a larger portion of assistance from each office practice student, would have more incentive to invest training time and attention in the student.

Conclusions Concerning Form and Content of the Rating Scales, Based on the Findings of the Preliminary Survey. Based on Part I, the following conclusions have been drawn as to the rating scales used:

1. The scales are probably too long for an outstanding acceptance by respondents.
2. Rating scale instructions might be simplified.
3. Combination of "importance" and "performance" scales was apparently confusing to some Part I respondents.
4. Many items on the rating scales were not pertinent to the office practice situations on which the preliminary survey was made.

5. In spite of the non-applicability of many items to the office practice situations, most items would seem to have utility in any scale sent to employers of graduates on full time jobs.

6. In spite of deficiencies noted above, office practice supervisors have indicated that the study has merit and should be pursued.

7. Refinement of the scales should be continued until an acceptable questionnaire or series of questionnaires is provided to employers for completion, with a reasonable percentage of returns received.

8. The major task would appear to be to reduce the size of the inquiry sufficiently so as to achieve a satisfactory return.

9. Since most of the information would be of real value and could not comfortably be eliminated, the writer should consider such alternatives as the following:

a. Sending a series of promotion letters preceding the rating scales to lay a groundwork of interest and acceptance so that, in spite of the magnitude of the task, a positive reaction may be obtained.

b. Preparing the scales in series to be sent intermittently, each part being subject to easy response.

c. Dividing, in accordance with acceptable sampling procedures, the employer population to be surveyed so that each employer need respond to only a part of the total questionnaire.

d. Sending the full packet of rating scales to employers just as was done in the case of office practice supervisors, with a determination to pursue and follow-up each set of rating scales until a satisfactory return has been achieved.

Recommendations Based on Part I

1. The persons responsible for the office practice program should systematically investigate possibilities for a substantial increase in

time spent in office practice by each student.

2. Every effort should be made to expand the office practice program--not only time-wise, but content-wise--so that students have the opportunity to function in almost every subject area for which they have been trained.

3. Some attempt should be made to promote improvement in the practice of clerical supervision: by retaining some qualified person to lecture from time to time on this subject, and/or by conducting periodic clinics or workshops wherein office practice supervisors can be helped and can help each other. Although work situations are different, the presentation of work to students might be made more uniform, and perhaps more professional. It is noted that some office practice supervisors do not otherwise have supervisory responsibilities nor opportunities. The value of training for supervision for these persons would seem obvious.

4. In view of the apparent need for an increase in the scope of the office practice training program, it is recommended that a study be made to determine whether or not the deterrents listed below are real or only apparent:

1. Under the present class schedules, extended office practice periods would not be possible without the requirement of makeup work, which, because of the "production" character of the training, would be extremely difficult and inconvenient--both to students and teachers.

2. During the first quarter of the 1959-1960 school year, office practice students were also assigned to their office practice supervisors as detail students; this permitted a double-period relationship. However, since many of the office practice and/or detail jobs call for boys to fill the positions, and since there are so few boys in the commercial curriculum, it was found impossible to continue this double-scheduling. "Detail" may involve almost any kind of work, but is often janitorial in nature--routine clerical tasks are also common for those assigned to assist teachers.

3. Although it has been suggested that downtown Lawrence merchants be contacted to cooperate in the office training program, it has been pointed out that Lawrence High School has apparently saturated the business community with office practice students.

5. In view of the findings of Part I of the study, a much larger survey of employers of recent Haskell commercial graduates should be conducted, taking into account the considerations suggested in the Conclusions Concerning Form and Content of the Rating Scales presented above.

Conclusions: Part II

Extent to Which Purposes of the Haskell Commercial Department Have Been Met. So far as the writer has been able to determine, no statement of purposes of the Haskell Commercial Department, per se, has ever been made. The Haskell handbook, at page 97, does make the following statement: "The course is designed to prepare students for specific types of employment, and this objective is an incentive to students throughout the course."¹ If this is the general statement of purpose, the purpose has been quite well met. It might be added, however, that the returns from this study indicate that the types of employment held by recent graduates are even more specific than has been the training in preparation for same.

It is thought that the purposes of instruction in each of the various courses are self-evident, and that as an aggregate these are essentially the objectives of the department. It can be seen from the results of the

¹Learn to Earn at Haskell, op. cit., p. 97.

study what course purposes have been well met and which have not.

Specific objectives of Haskell Institute as a whole also apply to the Commercial Department as a unit within the whole. Leadership Training as one overall objective has already been cited: "To prepare students for leadership in democratic society through practical life situations which provide opportunity for development of initiative and responsibility."¹ This study has shown, however, that in evaluating employee performance as to general characteristics, employers ranked twenty-sixth among all 28 items the trait called "Leadership abilities; dominance." In evaluating employee performance as to general characteristics, employers ranked twenty-fifth among 28 items the trait called "Initiative; eagerness to accept responsibility." These rankings were based on the frequencies of "below average performance" responses. It should be added, however, that performance in these characteristics, without respect to rank, was described as "average." In comparison with other similar items, this objective has not been fully achieved.

Conclusions Based Upon Responses to the Estimate of Instructional Efficiency, Part II. The following list of conclusions, by no means exhaustive, was prepared from an analysis of the results of the Estimate of Instructional Efficiency. Statements with reference to relative quality of instruction, as among the various subject areas, have primarily been based on frequencies of "below average" evaluations.

1. The overall quality of instruction in the Commercial Department at Haskell Institute, in the expressed opinion of supervisors and employers of

¹Ibid., p. 14.

100 recent graduates of the department, has been generally satisfactory.

2. Instruction in the following subject areas has been, relatively, less effective than that in other subject areas: Business English; Short-hand and Transcription. When not only "below average" responses, but all responses are taken into account, the following subject areas have been rated below the others as to instructional efficiency: Business Mathematics; Bookkeeping and Accounting.

3. Instruction in Typing has been, relatively, more effective than that in the other subject areas.

4. In view of the extremely high frequency of "no estimate" responses, the following subject areas are relatively little used on jobs held by the graduates of a recent three-year period: Business Law; Voice Writing Machines.

5. In view of the rather high frequency of "no estimate" responses, the following subject areas are relatively little used on jobs held by recent graduates of the Commercial Department: Bookkeeping and Accounting; Business Mathematics.

6. In view of the rather low frequency of "no estimate" responses, the following subject areas are quite extensively used on jobs held by recent graduates: Typing; Office Practice; Business English.

Conclusions Based Upon Responses to the Instructional Area Time Allotment Evaluation, Part II. The following list of conclusions, by no means a complete one, was prepared from an analysis of the results of the Instructional Area Time Allotment Evaluation. Some conclusions as to the appropriateness of time spent in the instruction of the various subject areas have already been drawn, based on evaluations of instructional efficiency.

1. The overall provision of instruction time in the various subject areas of the Commercial Department at Haskell Institute is, in the expressed opinion of supervisors and employers of 100 recent graduates of the department, generally in excess of what would be required for satisfactory performance on the jobs held.

2. The provision of instruction time in the following subject areas is greatly in excess of that required for satisfactory performance on jobs held by recent graduates of the Commercial Department: Business Law; Voice Writing Machines.

3. In view of the types of employment taken by 100 recent graduates of the Commercial Department, the provision of instruction time in the following subject areas is excessive: Bookkeeping and Accounting; Business Mathematics.

4. The provision of instruction time in Typing is, relatively speaking, appropriate to the demands of positions held by recent graduates of the Haskell Commercial Department.

5. The provision of instruction time in Business English is, relatively, somewhat less than required for satisfactory performance on the job.

6. When individual ratings are considered, and in view of the fact that every subject area recorded at least a five per cent time allotment deficiency, none of the training time allotments has been universally considered excessive, so far as meeting the performance requirements of certain jobs held by recent graduates is concerned.

Conclusions Based Upon Responses to the Occupational Proficiency Rating Scales, Part II. Results from the Occupational Proficiency Rating Scales were so voluminous as to defy ready summarization. Following are a few of the most obvious relationships. It would not be feasible to list in this paper as many conclusions as can be drawn from the data.

1. The oft-repeated generalization that employers are more concerned with the social and non-technical skills of employees than with the subject matter or technical skills would seem to be substantiated by the results of this study.

2. Based on the number of frequencies of "very important" responses, the subject areas which are most important to employers of recent Haskell Institute Commercial graduates are Typing and Business English.

3. Based on the frequencies of "not important" responses, the following courses are considered least important by employers of recent Haskell Commercial graduates: Business Law; Bookkeeping and Accounting; Business Mathematics; and Voice Writing Machines.

4. The high percentages of "performance not known" responses for the following areas indicate that they are of limited importance, in the opinions of employers, to the jobs rated: Business Law; Bookkeeping and Accounting; Business Mathematics; and Voice Writing Machines.

5. Various analyses all point to the fact that employers of recent Haskell Commercial graduates consider the items listed under Work Habits as highly important, and the items listed in the General Characteristics section as being of considerable importance so far as satisfactory job performance by their clerical employees is concerned.

6. Based on the frequency of "Above Average Performance" responses, employers have felt that the performance of recent Haskell graduates has been best in the non-skill areas. More specifically, ratings in the Work Habits, General Characteristics, and Personal Characteristics sections were somewhat higher, generally, than ratings in the subject-matter areas. With reference to conclusion number one above, relative good performance in the non-skill areas would seem to coincide with the wishes of employers.

7. Based on section total frequencies of "above average performance" responses, the non-skill performance of recent graduates has been thought best in the area of Personal Characteristics, and almost as good in the Work Habits area. Performance as to items listed under General Characteristics has not been quite so good, but even so about half of the responses obtained showed "above average" evaluations.

8. Based on the frequencies of "Below Average Performance" responses, employee performance has been least satisfactory in the following subject areas: Shorthand and Transcription; Bookkeeping and Accounting; and Business English.

9. Employers consider the dependability-reliability item of utmost importance. Ratings were quite good for this trait, but 11 per cent were rated "below average."

10. Rated employees were considered deficient, from the overall view, in a number of traits which were closely related. This cluster included: self-expression, extroversion, assertiveness; enthusiasm, spirit, zeal, zest; initiative, eagerness to accept responsibility; desire for self-improvement and promotion; self-confidence, self-reliance; friendliness, ease in meeting people.

11. Ratees were considered deficient in leadership abilities, but employers generally considered this trait not vital when thinking in terms of positions held by the rated employees.

12. While the personal characteristics of recent graduates were generally considered very good, employers regard several of the items asked about as being so personal as to not be rightfully within the province of their evaluation.

13. Employers of recent graduates regard the ability to follow directions as absolutely essential. Ratees need some improvement in this area, for eight per cent were considered deficient.

14. Accuracy in all phases of performance is regarded extremely important; relatively large percentages of "below average performance" in items related to accuracy--of which there were at least a few in almost every section--suggests that much improvement is needed.

15. Because of the magnitude of the task, conclusions drawn from results in each of the Occupational Proficiency Rating Scales skill subject areas will not be listed. However, deficiencies and items of importance can be, and should be, noted by interested persons in the specific areas with which they are concerned. It is probable that at least one conclusion could be drawn from each statistical datum in the appendices; additional conclusions might be inferred in infinite numbers when the multiplicity of possible cross-references of data are contemplated.

Recommendations Based on Part II

1. It is recommended that the contents of this paper, which will be made available to administrative officials at Haskell Institute, be directed to the attention of all staff members in the Commercial Department.

2. It is recommended that the portions of this paper which relate to General and Personal Characteristics, and Work Habits, when made available to administrative officials at Haskell Institute, be directed to the attention of all staff members in the Guidance Department.

3. It is recommended that group process methods be planned whereby all staff members in the Commercial Department, using the contents of this paper as only one of several tools, systematically review the curriculum of the Commercial Department, giving special attention to those problems which are common to all classes, and giving effect to the review by making written suggestions and recommendations directed to the proper officials.

4. It is recommended that subject area conferences be conducted, for example involving all machine instructors or both Typing instructors, wherein the results of this study are evaluated with reference to current teaching practices and course content. Further, it is recommended that these conferences result in establishment of what the writer chooses to call "deficiency reduction schedules" for each subject, giving priority to items regarded by employers as very important but relatively poorly performed and systematically working toward elimination of all weaknesses suggested by the findings of this study. These conferences should be

continuing, and not limited to a single session. Planning should be "long range" as well as "short range."

5. In view of the homogeneity of skills required in jobs held by many recent graduates, indicating the relatively small demand for wide ranges of skills, it is recommended that administrative officials at Haskell Institute seriously consider alteration of the Commercial curriculum so that some students, whose aptitudes lie in a given direction, may choose to obtain more intensive preparation in that area, to the exclusion of certain other skills in which their aptitude is less and in which they, based on the evidence, will probably not function as employees.

6. Prior to the taking of any definite action on Recommendation 5, however, it is recommended that an investigation be made of the skills performed by employees five to ten years after their graduation from the Haskell Commercial Department. Such a study would indicate whether the skills used more nearly typified the full range of the present curriculum than required during their early years of employment. It should be kept in mind, however, that even if it is found that the scope of activity is broadened after several years' employment, the value of diversified training received many years earlier might be seriously doubted.

7. Also prior to the taking of any definite action on Recommendation 5, it is recommended that an investigation be made of current placement practices to determine whether graduates might find jobs which more nearly utilize the full array of skills acquired in training.

8. It is recommended that, based on the findings of this study, consideration be given by the proper officials to the possible elimination of, addition to, or substitution of certain courses in the curriculum.

For example, in view of the clustering of deficiencies in the areas of self-expression and self-confidence, it is recommended that the feasibility of a Speech course requirement be studied.

9. It is suggested that, using the data collected in Part II of this study and other similar data, further studies designed to result in improvement of the Commercial curriculum be made. Such investigations might well include, but not be limited to, the following: (a) Comparison of evaluations by employers and teachers to determine whether teachers "high rate" or "low rate" their students, based on employer standards. (b) Identification as to how wide the dispersion of "below average performance" ratings among the various rated employees. For example, what per cent of the total "below average performance" responses was attributed to, say, the lowest-ranked five or ten ratees? If a few graduates received an inordinately large number of low ratings, could those students have been identified before admission, or were they identified before graduation? (c) Comparison of salaries earned on the job with grades earned in school. (d) Determination of the extent to which graduates return to their home areas for employment. (e) Comparison of employer evaluations of those who returned to home areas with similar evaluations of those who obtained employment elsewhere. (f) Comparison of evaluations of boys with evaluations of girls, drawing pertinent conclusions for curriculum improvement. (g) Comparison of evaluations of government-employed graduates with evaluations of non-government employees. (h) Investigation as to reasons for the very high percentage of government employment among graduates and determination as to whether this is in any way detrimental to the assimilative process.

In Conclusion. One final comment should be added before this paper is concluded, and should be kept in mind through all reflections upon this study: It is the standards of the best business offices that must be met, not the standards of the poorest, nor even of the most common.¹ The standards of the majority, of course, are of vital concern because of the school's interest in serving the needs of the largest number of students. This study has been aimed in large part at detecting average or modal concepts of what skills and characteristics are important to employers of recent graduates, and what performance levels Haskell Commercial graduates have demonstrated in those respective skills and traits. Evaluations of as many as 100 graduates very likely represents "average" standards. Therefore, weaknesses identified in this paper very probably represent performance which is below the standard of the "average" office. Such deficiencies would be all the more noticeable in business offices having the very highest standards. For these reasons, the writer has urged that every possible step be taken to improve those areas of training which employers in this study have identified as needing improvement.

It is believed that the data obtained in this study are valid. However, the most significant outcomes of the investigation do not appear in this thesis, but will accrue as the Commercial staff interprets the results of the surveys and decides to take remedial action.

¹Kraus, "What Are the Office Standards and Practices in Your Community?" Business Education Forum, December, 1949.

ACKNOWLEDGMENT

It would be impossible to properly recognize all the persons who have assisted in the conduct of this study. However, certain persons have contributed so much that they deserve special mention. The writer wishes to thank his advisor, Dr. J. Harvey Littrell, for able and extensive counsel. Dr. Cloy S. Hobson of the University of Kansas also assisted in the early stages of the investigation. The Head of the Commercial Department at Haskell Institute, Mrs. Mary Louise Neibarger, has generously supported the work. Superintendent Selon G. Ayers and Principal Floyd E. Stayton have given administrative approval and support. Several staff members in the Commercial Department gave useful suggestions to assist in the drawing up of tentative rating scales: Mrs. Matilda Harjo, Mrs. Thelma Haverty, Miss Selma Hoffmann, Mrs. Grace Kennedy, Mrs. Alice Vaughn, Mr. Alphas Wilson, and Mrs. Berta Lee Winston. The Office Practice supervisors on the campus carefully completed the lengthy rating scale forms and volunteered other valuable information. These persons included: Miss Martha Bone, Mr. W. A. Coffin, Mrs. Wanda Gray, Miss Hoffmann, Mr. Jack Mauterer, Mrs. Neibarger, Mr. Cornelio Paez, Mrs. Enola Pipes, Mr. Pete Shepherd, Mrs. Beatrice Socksy, Mr. Clennon Sockey, Mr. Stayton, Miss Maxine Van Natta, Mrs. Vaughn, and Mr. Clarence Winston. Without the cooperation of the many, many employing supervisors who carefully responded and who must, unfortunately, remain nameless, Part II of the study would not have been possible. Finally, but importantly, the writer wishes to thank his wife, Elaine, who actually did what the wives of these writers have long been credited with doing.

J. B. L.

REFERENCES

- Anderson, Kenneth E., E. Gordon Collister, and Carl E. Ladd. The Educational Achievement of Indian Children. Bureau of Indian Affairs. Department of the Interior. Lawrence, Kansas: Haskell Institute Print Shop, March 1953.
- Archer, Fred C. The Origin and Extent of Standards in Clerical Work. Unpublished Doctoral thesis, New York University, 1951.
- Ayers, Solon G. An Investigation of Terminal Vocational Education at Haskell Institute. Unpublished Doctoral thesis, University of Kansas, 1952.
- Baker, Louise L. and Selma M. Hoffmann. A Report of a Study in Changing Temperament Traits as Measured by a Test and Re-test on the Guilford-Zimmerman Temperament Survey. Unpublished report made at Haskell Institute, Lawrence, Kansas. 1954.
- Balthassar, R. D. "Are we Educating Square Pegs for Round Holes?" The Balance Sheet, Jan. 1960, 41(5):196-198.
- Beatty, Willard W. Education for Cultural Change. U. S. Department of the Interior. Bureau of Indian Affairs. Chillico, Oklahoma: Printing Department, Chillico Indian Agricultural School, 1953.
- _____. editor. "Commercial Training at Haskell." Indian Education, May 15, 1947, 152:5.
- Bell, Mary L. and Russell Sickelbower. "Students Learn About Standards Through Office Visits." Business Education Forum, April 1958, 12(7):28-29.
- Business Looks at Business Education. A Study sponsored by: School of Business Administration, University of North Carolina, Chapel Hill, 1958. 30 p.
- Chapman, Carolyn E. "Secretaries for Doctors." Journal of Business Education, May 1958, 33(8):323-324.
- Chomitz, David Lincoln. Business Education for Adults in the Junior College. Monograph C-5 South-Western Publishing Company. Nov. 1957, 56 p.
- Conover, Hobart H. "Business Education, Too, Should Have Its Luniks." The Balance Sheet, May 1960, 41(9):394-398.

- Coombs, L. Madison, Ralph E. Kron, E. Gordon Collister, and Kenneth E. Anderson. The Indian Child Goes to School. United States Department of the Interior. Bureau of Indian Affairs. Lawrence, Kansas: Interior, Haskell Press, 1958.
- Crank, Doris H. and Floyd L. Crank. "Imperatives in Planning the Secondary School Business Education Curriculum." The Balance Sheet, April 1959, 40(8):243-346, 350.
- Dempsey, Audrey. "Hand in Hand - Business and Business Education." Business Education Forum, Jan. 1959, 13(4):35.
- "Evaluating the Curriculum." Improvement of Business Education Practices. American Business Education Yearbook, 1951, 8:215-233.
- Ferguson, William A. An Analysis of the Test Scores of Applicants to the Commercial Program at Haskell Indian Institute. Unpublished Master's report, University of Kansas, Lawrence, Kansas, 1952.
- Follow-Up Report of the 1956 Graduates. Unpublished report, Kansas State Teachers College, Pittsburg, Kansas.
- "Follow-Up of Secondary School Students." Leads to Better Secondary Schools in Michigan. Michigan State Board of Education. Lansing: 1943.
- Forkner, Hamden L. "Characteristic of a Good Business Education Program." The Bulletin of the National Association of Secondary School Principals. Nov. 1949. 13-17.
- Gray, Wanda W. Some Suggestions for the Improvement in the Scope of the Courses in Foods at Haskell Institute. Unpublished Master's thesis, University of Kansas, 1957.
- Gruber, Joseph. "Cooperation Between Business Education Can be a Reality." The Balance Sheet, March 1961, 42(7):294-295.
- Gunders, Henry. "Clerical Work Measurement, Part I." Journal of Business Education, Nov. 1958, 34(2):87-89.
- _____. "Clerical Work Measurement, Part II." Journal of Business Education, Dec. 1958 34(3):122-124.
- Guthrie, Mearl R., Jr. The Measurement of Personal Factors Related to Success of Office Workers. Unpublished Doctoral thesis, University of Minnesota, 1953.
- Guthrie and Stutsman. "What Business Education Is Doing to Harmonize School and Business Standards." The Business Education Program in the Expanding Secondary School. United Business Education Association. 1957.

- Harms. "Standards for the Office of the Next Decade." The Business Education Program in the Expanding Secondary School. United Business Education Association. 1957.
- Harris, Chester W. editor. Encyclopedia of Educational Research. New York: The MacMillan Company, 1960. 173-184.
- Hicks, Charles B., and Guy Hollis. "100 Summaries of Studies and Research in Business Education - 1953." National Business Education Quarterly, Oct. 1954, 23:1-100.
- Himstrest, William C. "Analysis and Criticism of Research in Business Education, 1952-1956." The Balance Sheet, Dec. 1958, 40(4):148-150.
- Hoffmann, Sslma M. A Follow-Up Study of the Graduates of the Haskell Commercial Department from Classes, 1955, 1954, and 1953. Unpublished Master's report. University of Kansas, July 1956.
- Holdridge, Thelma E. "We Evaluated Our Medical Secretarial Course." Business Education World, Nov. 1959, 40(3):22-23.
- Humphrey, Clyde W., Lewis R. Toll, and Marion M. Lamb. "Recent Developments in Business Education." The Changing Business Education Curriculum. American Business Education Yearbook, 1947, 4:345-386.
- Kane, Margaret O. A Follow-Up of Hunter Collegs Secretarial Graduates as a Basis for Curriculum Making. Unpublished Doctoral thesis, University of New York, 1955.
- Keithley, Erwin M. A Study of Business Education Graduates of the University of California, Los Angsles, with Implications for Improving Curricula in Business Tsacher Training. Unpublished Doctoral thesis, University of California, 1952.
- Koeninger, Rupert C. Follow-Up Studies, A Comprshensive Bibliography. Lansing: State Board of Education, Secondary Curriculum Study, 1942.
- Krause, Ruthetta. "What are the Offics Standards and Practices in Your Community?" Business Education Forum. Dec. 1949, 4(3):34-35.
- Kyls, Geraldine. "The Stenographic Supervisor Evaluates Beginnrs." Business Education Forum, Oct. 1959, 14(1):10-12.
- Learn to Earn at Haskell. Bulletin of Information, Haskell Institute. Lawrence, Kansas, 1961.
- McGill, E. C. "A Look at the Business Curriculum." Business Education Forum, Jan. 1960, 14(4):6-7.

- Nichols, Frederick G. Essential Characteristics of a Good Business School. New York: The Gregg Publishing Company, 1951.
- _____. "Using the Findings of Job Studies to Improve Instruction in Business Subjects." Business Education Forum. May, 1953.
- The Occupational Follow-Up and Adjustment Service Plan. New York: National Association of Secondary School Principals, 1940.
- Ossa. "What Business Expects from High Schools." Personnel Journal. June, 1953.
- Face, Robert C. They Went to College. Minneapolis: University of Minnesota Press, 1941. p. 18.
- Pipes, Enola M. A Report on the Use of an Inventory in Identifying the Potential Drop-out in a Federal Boarding School for Indians. Unpublished Master's report. University of Kansas, Lawrence, Kansas, 1958.
- "The Questionnaire." Research Bulletin, Jan. 1930. National Education Association, Research Division. 1-51.
- Rummel, J. Francis. An Introduction to Research Procedures in Education. New York: Harper & Brothers, 1958.
- Schuld. "The Employer Looks at the High School Graduate." The Balance Sheet. May, 1949.
- Selden, William. "Business Education Curriculums in Pennsylvania." The Balance Sheet, Feb. 1959, 40(6):244-248.
- Spiris, Mitchell J. A Follow-Up Study of the Graduates of Evanston Township High School, Evanston, Illinois. Unpublished Master's thesis, Northwestern University, 1950.
- Stuart, James L. A Scale for Determining the Attitudes of High School Business Education Students toward Certain Aspects of Office Work. Unpublished Doctoral thesis, Ohio State University, 1952.
- Thomas, Ralf J. "Determining Office Standards Through a Community Survey." Business Education Forum, Oct. 1957, 12(1):27,30.
- Timmons, Ellen R. "The Personnel Director Selects the Stenographer." Business Education Forum, Oct. 1959, 14(1):14-15.
- Walker, Wanda. A Follow-Up Study of the Commercial Girl Graduates of the Theodore Roosevelt High School of Wyandotte, Michigan, for the Years of 1930-1939, Inclusive. Unpublished Master's thesis, University of Michigan, 1941.

APPENDIX A .

Memorandum to Commercial Teachers

Subject: Survey of Employers of Haskell Commercial Graduates

Room 2, Commercial Department

MEMORANDUM

To: (Commercial Teachers)
 Copy: Mrs. Neibarger
 From: Mr. Laughlin

Subject: Survey of Employers of Haskell Commercial Graduates

Under the direction of Dr. Cloy Hobson at the University, and with the approval of Mrs. Neibarger, I am in the process of conducting a survey of the employers of Haskell Commercial graduates. The purpose of this survey is to determine the strengths and weaknesses of our graduates, as seen by their employers. This information can then be used by all of us in the department in an effort to improve the quality of the "product" we help to turn out. Perhaps there are certain things we are stressing too much; others we are leaving out. Some weaknesses in graduates are doubtless beyond our control, as will always be true. Most of us probably feel we are doing what should be done; if so, the survey may help to "salve our egos" and reassure us that our curriculum is sound.

Since you are the most expert person in the department in your particular field, it is logical that I ask you for suggestions as to what employee traits, characteristics, achievements, or abilities we should request employers to pass judgment upon. This would include general abilities and attitudes, but, more especially, the specific vocational skills taught in your classes, plus skills you would teach if you had more time.

Please jot down on the accompanying sheet the items which you feel are very important to a supervisor as he or she evaluates the clerical performance of any of our graduates. Reexamination of your course objectives, course outlines, textbook outlines, and your experiences as a supervisory person might help you to indicate the areas of performance to be surveyed. Or, help might come through reflection upon what, in your subject area, the "ideal" office worker is like.

I realize that you are extremely busy at this time of year (as teachers are always), but I trust that, in realizing the possibilities of finding out whether or not employers are happy with the work we are doing, you will want to cooperate in this matter. Intermediate and complete results of the survey, of course, are to be available to you when obtained.

Self-criticism is a most difficult thing for all mortals, but I hope each of us will include in our items for evaluation those skills which we perhaps have not taught as well as we might, in addition to the areas where we feel sure the graduates are extremely capable—thereby making us "look good." The tenor of the survey is to find out how we can better equip our students to meet the desires and demands of their employers.

Please return the completed attached sheet at your earliest convenience. Your assistance is sincerely appreciated.

APPENDIX B

Complete Packet of Materials Carried to Campus Office
Practice Supervisors, and Including Part I Results:

Memorandum to Office Practices Supervisors
Instructional Area Time Allotment Evaluation
Data and Instruction Sheet

Twelve Occupational Proficiency Rating Scales:

General Characteristics
Personal
Work Habits
Typing
Shorthand and Transcription
Voice Writing Machines
Business English
Bookkeeping and Accounting
Business Mathematics
Business Law
Adding Machines and Calculators
Duplicating Machines
Addenda

January 7, 1960

MEMORANDUM

To: Office Practice Supervisor

From: Bruce Laughlin

Subject: Survey to Determine Competencies of Office Practice Students
Evaluation of: (office practice student, 2nd qtr., 1959-60)

With the counsel of Dr. Cloy Hobson at the University, and with the approval of Mrs. Neibarger, Commercial Department Head, a survey is being conducted to determine the weaknesses and strengths of seniors in the Commercial Department, and commercial graduates of recent years who are now employed. Opinions of Office Practice supervisors are sought to indicate the relative competencies of members of the Class of 1960. Later, based on the response and suggestions of yourself and the other supervisors as to the questionnaire forms which are enclosed, a refined questionnaire will be sent to employers of commercial graduates, Classes of '57, '58, and '59.

The purpose of this endeavor is to obtain answers to such questions as the following: In general, how well satisfied are supervisors and employers with Haskell Commercial students as employees? In what subject areas are our graduates weak? Can these weaknesses be attributed to poor or inadequate training? Can deficiencies be met through alteration of our training program? In which areas are we spending too little, or too much, time in training? What are the non-business deficiencies of our graduates, and how can we overcome these? Are our graduates sufficiently well trained that they may anticipate regular promotions; if not, what are the reasons?

The enclosed forms, which you are requested to thoughtfully complete, will seem disgustingly long (as, alas, does this memo!) Closer investigation will reveal, however, that the topics considered are, for the most part, important, and that the forms can be easily filled in with the simple insertion of X marks; no lengthy essay-type answers are called for. Since your contact with the student has been limited in time and scope, your evaluation will be less extensive than if the student were a full-time employee. This will permit you to complete the rating scale quite rapidly, as many items will not be applicable to your particular Office Practice trainee situation.

Although the questionnaire will require your careful attention, it is felt that as a result you will be rewarded with more competent and satisfactory office practice help--to say nothing of the personal satisfaction you may get in knowing that you are laying the groundwork to improve the learning opportunities for our students, and enhance their chances for success.

Since the Commercial Department cannot give supervisors and employers exactly "what they want" in students and employees without knowing whether or not our students "measure up" to supervisor-employer standards, it is important that you carefully consider each item in the questionnaire. Any unfavorable or negative answers are just as important as are favorable ones--probably more so. Over-use of "average" answers should be avoided. If you feel that the forms are too long to complete at one sitting in your busy schedule, please work intermittently in the evaluation. It is vital that each item be "thought through"--not recklessly answered "just to get the thing done."

Even though your ratings will be based on a certain individual, the survey is not a "personal" thing; that is, criticisms of students will in no way damage them, or you, or anyone else; information will be held in the strictest confidence. Locating patterns of student deficiency is the overall objective.

It is realized that this request is "above and beyond the call" of your regular duties; nevertheless, the request is not apologetically made--for we in Education have a moral responsibility to labor long and hard to improve the training of youth.

Please complete the forms by Monday, January 11. Because of their confidential nature, I shall personally call for them on Tuesday. Intermediate and final results of the study will be available to you.

Your cooperation in this project is sincerely appreciated.

ESTIMATE OF INSTRUCTIONAL EFFICIENCY

NAME of employee whose training is being evaluated: _____

date of evaluation: _____

name of rater: _____

job or position title: _____

position of rater: _____

INSTRUCTIONS: Through close association and observation you have doubtless come to know the employee quite well. Although it is not easy to separate your estimate of the employee's God-given ability from your estimate of the quality of training the employee received, you probably have drawn some quite definite conclusions. If the employee seems highly intelligent, but does not perform well in certain tasks, you assume the training for these tasks was not good; conversely, if the employee seems rather dull in general, but performs many tasks well, you assume the training in these areas was good. Keeping in mind: (1) the apparent learning ability of the employee; (2) the amount of training time (see below); and, (3) the usual level of performance by the employee in each subject area, please ESTIMATE THE PROBABLE QUALITY OF INSTRUCTION which the employee received. Mark one X only for each of the ten listed subject areas; use column 6 only if the subject area being considered is not a part of the employee's job.

Course, Subject or Instructional Area	No. of 55-min. periods	Time Spent in Training		Estimate of Instructional Efficiency--Quality of Training							
		Total hours*	Training time, converted (to work weeks and days)**	1 out-stdg.	2 very good	3 av. or satisf.	4 barely satisf.	5 not satisf.	6 no est.	comments	
TYPING	360	330	8 weeks and 1 day		11 58%	8 42%					
SHORTHAND & TRANSCRIPTION	540	495	12 weeks and 2 days		9 47%	6 32%				4 21%	
BUSINESS ENGLISH	360	330	8 weeks and 1 day		4 21%	11 58%	1 5%			3 16%	
BOOKKEEPING & ACCOUNTING	540	495	12 weeks and 2 days		3 16%	3 16%				13 68%	
BUSINESS MATHEMATICS	90	83	2 weeks and 1/2 day		3 16%	3 16%				13 68%	
BUSINESS LAW	90	83	2 weeks and 1/2 day		2 11%	2 11%				15 79%	
ADDING MACHINES & CALCULATORS	25	23	3 days		4 21%	2 11%				13 68%	
DUPLICATING MACHINES	15	14	1-3/4 days	1 5%	5 26%	5 26%				8 42%	
VOICE WRITING MACHINES	15	14	1-3/4 days		2 11%	2 11%				15 79%	
OFFICE PRACTICE (orientation; on-the-job training)	45	41	1 week Totals	1.5%	43 25%	42 25%	1 .5%			84 49%	

(*) approximate; allowance has not been made for time lost due to occasional assemblies, etc.

(**) conversion to 40-hour work weeks and/or 8-hour work days is for the purpose of making training time amounts more understandable.

Office practice supervisors were not asked to evaluate their own performance.

name of rated employee: _____

INSTRUCTIONAL AREA TIME ALLOTMENT EVALUATION

Form: jbl/12-59

name of rater: _____

job or position title: _____

date of evaluation: _____

For this employee POSITION: _____

Course, Subject or
Instructional AreaTime Spent in TrainingOn the job he (she) now holds
the amount of time spent in training was probably:mark an X in columns
1, 2, 3, 4, or 5 for
each subject area
other; please
add remarks
or comments
which are
appropriate

	no. of 55-min. class periods	Time Spent in Training		the amount of time spent in training was probably:					
		total hours*	training time, converted (to work weeks and days)**	1 wasted not req'd. on this job	2 more than is needed on this job	3 about right for this job	4 less than is needed on this job	5 far too little for this job	
TYPING	360	330	8 weeks 1 day		1 5%	17 89%	1 5%		
SHORTHAND & TRANSCRIPTION	540	495	12 weeks and 2 days	3 16%	6 32%	9 47%	1 5%		
BUSINESS ENGLISH	360	330	8 weeks and 1 day	4 21%		13 68%	2 11%		
BOOKKEEPING & ACCOUNTING	540	495	12 weeks and 2 days	8 42%	7 37%	4 21%			
BUSINESS MATHEMATICS	90	83	2 weeks	8 42%	5 26%	5 26%			1 5%
BUSINESS LAW	90	83	2 weeks	11 58%	7 37%				1 5%
ADDING MACHINES & CALCULATORS	25	23	3 days	7 37%	6 32%	6 32%			
DUPLICATING MACHINES	15	14	1-3/4 days	7 37%	2 11%	9 47%			1 5%
VOICE WRITING MACHINES	15	14	1-3/4 days	12 63%	5 26%	1 5%			1 5%
OFFICE PRACTICE (orientation; on-the-job training)	45	41	1 week	60 35%	39 23%	64 38%	4 2%		4 2%
			Totals						

(*) approximate; smaller amounts are rounded to the nearest hour; allowance has not been made for time lost due to occasional assemblies, etc.

(**) to facilitate comprehension of time amounts involved, total training time in each subject area has been converted to 40-hour work weeks and/or 8-hour work days; i.e., it is pretended that only one subject was taken at a time; this is for understanding only, and was not the fact.

NOTE: In completing this form, please keep in mind: (1) the native ability of the employee as observed by you; (2) the amount of time spent in the study of each instructional area, as indicated above; (3) the commonly-understood content of each named subject area; (4) the duties of the position which the employee holds. Think in terms of THIS EMPLOYEE and THIS JOB and THIS TRAINING, as best you can assume it.

Office practice supervisors were not asked to evaluate their own performance.

Name of employee being rated, last name first _____ Date of _____
evaluation: _____
Name of employing organization: _____
Address of employing organization: _____
Address where employee works, if different: _____
Name of employee's immediate supervisor: _____
Grade, title, position of this supervisor: _____
Name, grade, title, position of rater _____
if other than immediate supervisor: _____
Title of rated employee's position: _____
Brief job description: (please attach previously prepared job or position
description if convenient) _____

Date rated employee was employed: _____ No. no.'s. present jobs: _____
No. no.'s. rater has supervised employees: _____ No. persons who normally work
in the rated employee's
No. employees under rater's supervision: _____ primary working areas
Av. no. of employees with whom rated employee _____
has daily business contact involving _____ Estimated no. of non-employees
exchange of information or materials: _____ with whom rated employee has
daily business contact: (from _____ to _____ persons)
No. of employees in this organization under _____
rater's supervision who have jobs or _____
duties similar to those of rated employee: _____

INSTRUCTIONS FOR COMPLETING THE OCCUPATIONAL PROFICIENCY RATING SCALE:

1. Observe the layout of page 1 of the Occupational Proficiency Rating Scale. Visualize and ponder the two general types of information which are sought.
2. Be aware that an X placed in a column will indicate an estimate or evaluation. General headings (items which are not numbered) need not be rated.
3. Complete the left half of the entire rating scale before starting the right half. That is, fill in the three "Importance" columns for all items before evaluating ANY items as to "performance." (Read all instructions first, tho.)
4. Cover the right half of the rating scale while you complete the left half. That is, cover the six "performance" columns while you rate "importance."
5. Evaluate the importance of each item on the basis of whether the item is: (a) VERY IMPORTANT; (b) FAIRLY IMPORTANT; or (c) NOT IMPORTANT to satisfactory performance of the job which the rated employee holds. For each item, choose but one of the three columns named. (Time spent at a task will probably have a direct influence on relative importance, but not necessarily so. That is, some abilities which are not often used MAY nevertheless be of critical import when called for on a particular job.)
6. After completing the left half of the scale, cover that half of each page as you complete the right half of the entire rating scale. That is, cover the three "importance" columns while you rate "performance or condition."
7. Rate the employee for each item on the basis of whether his (her) performance or condition for that item is: (1) OUTSTANDING; (2) VERY GOOD; (3) AVERAGE OR SATISFACTORY; (4) BARELY SATISFACTORY; (5) NOT SATISFACTORY; or (6) NOT KNOWN. For each item, choose but one of the six columns named.
8. In rating the employee's performance or condition, use column 6, the NOT KNOWN column, ONLY if you have absolutely no basis for evaluation. This column should not be used as a dumping ground for uncomfortable or unfavorable answers.
9. Reasons for completing the left half ("importance") columns while the right half ("performance") columns are covered, and vice versa:
 - a. This permits the rater to answer more rapidly and easily, without disturbing the trend of thought--first as to "this job," then as to "this employee."
 - b. It also permits more accurate choices, as the influence of one type of rating upon the other is reduced.
10. After completion of the rating scale, there should be TWO X's for each item--one to the left of the item description (in any one of the three "importance" columns), and another to the right of the item description (in any one of the six "performance or condition" columns).
11. Remarks in the "comments" column are welcomed, but not expected for a large number of items. Comments are especially sought to identify specific defects or weaknesses, or outstanding attributes.

OCCUPATIONAL PROFICIENCY RATING SCALE

page 1

IMPORTANCE OF ITEM EVALUATED TO JOB FIELD			ITEM EVALUATED (employee trait, characteristic, achievement, or ability)	EVALUATION: RATING OF EMPLOYEE'S PERFORMANCE OR CONDITION						comments
very impt.	fairly impt.	not impt.		1 out- stdg.	2 very good	3 av. or satisf.	4 barely satisf.	5 not satisf.	6 not known	
			GENERAL CHARACTERISTICS							
12 63%	7 37%		1. Adaptability		13 68%	5 26%	1 5%			
15 79%	4 21%		2. Alertness; intelligence; analytical ability		7 37%	10 53%	2 11%			
18 95%	1 5%		3. Attendance regularity	7 37%	8 42%	4 21%				
8 42%	11 58%		4. Cheerfulness; pleasantness	4 21%	9 47%	5 26%	1 5%			
15 79%	4 21%		5. Common sense; judgment		7 37%	12 63%				
11 58%	8 42%		6. Cooperativeness; helpfulness	2 11%	9 47%	8 42%				
10 53%	9 47%		7. Courtesy; manners; etiquette	1 5%	12 63%	6 32%				
2 11%	8 42%	9 47%	8. Creativeness; imagination		1 5%	7 37%	2 11%		9 47%	
16 84%	3 16%		9. Dependability; reliability	3 16%	8 42%	8 42%				
5 26%	10 53%	4 21%	10. Desire for self-improvement and promotion		4 21%	5 26%			10 53%	
13 68%	6 32%		11. Effort; industry	3 16%	8 42%	7 37%	1 5%			
5 26%	12 63%	2 11%	12. Enthusiasm; spirit; zeal; zest	1 5%	6 32%	9 47%	3 16%			
12 63%	7 37%		13. Friendliness; ease in meeting people	2 11%	6 32%	7 37%	3 16%	1 5%		
4 21%	15 79%		14. Health; physical vigor	1 5%	9 47%	6 32%	1 5%		2 11%	
15 79%	4 21%		15. Honesty; integrity; character	3 16%	11 58%	3 16%	1 5%		1 5%	
11 58%	8 42%		16. Initiative; eagerness to accept responsibility	2 11%	5 26%	9 47%	1 5%	1 5%	1 5%	

OCCUPATIONAL PROFICIENCY RATING SCALE

IMPORTANCE OF ITEM EVALUATED TO JOB HELD			ITEM EVALUATED (employee trait, characteristic, achievement, or ability)	EVALUATION: RATING OF EMPLOYEE'S PERFORMANCE OR CONDITION						comments									
very imp.	fairly imp.	not imp.		1 out-stdg.	2 very good	3 av. or satisf.	4 barely satisf.	5 not satisf.	6 not known										
GENERAL CHARACTERISTICS (continued)																			
1	5%	8	42%	10	53%	17.	Leadership abilities; dominance	3	16%	5	26%	1	5%	1	5%	9	47%		
13	68%	4	21%	2	11%	18.	Loyalty to organization & to supvn.	2	11%	8	42%	5	26%			4	21%		
7	37%	12	63%			19.	Mental health; adjustment to environ't.	1	5%	8	42%	6	32%			4	21%		
13	68%	4	21%	2	11%	20.	Morals; ethics	2	11%	10	53%	3	16%			4	21%		
12	63%	7	37%			21.	Persistence; "sticktoitiveness"	1	5%	8	42%	10	53%						
4	21%	11	58%	4	21%	22.	Physical quickness; mobility; agility	1	5%	7	37%	10	53%			1	5%		
7	37%	12	63%			23.	Poise; stability when under stress			3	16%	11	58%			5	26%		
14	74%	5	26%			24.	Respect for authority, rights, property	5	26%	7	37%	6	32%			1	5%		
6	32%	12	63%	1	5%	25.	Self-confidence; self-reliance	1	5%	5	26%	11	58%	1	5%	1	5%		
2	11%	12	63%	5	26%	26.	Self-expression; extroversion; assert.	1	5%	2	11%	10	53%	2	11%	1	5%	3	16%
6	32%	12	63%	1	5%	27.	Sense of humor			6	32%	8	42%	2	11%	1	5%	2	11%
13	68%	6	32%			28.	Tactfulness; social awareness			6	32%	11	58%					2	11%
(please make additions as you see fit)																			
						29.													
						30.													
						31.													
270	222	40		Totals, including previous page			43	197	206	22	5	59							
51%	42%	8%					8%	37%	39%	4%	1%	11%							

OCCUPATIONAL PROFICIENCY RATING SCALE

Jbl/12-59

IMPORTANCE OF ITEM EVALUATED TO JOB HELD			ITEM EVALUATED (employee trait, characteristic, achievement, or ability)	EVALUATION: RATING OF EMPLOYEE'S PERFORMANCE OR CONDITION						comments
very imp.	fairly imp.	not imp.		1 outstdg.	2 very good	3 av. or satisf.	4 barely satisf.	5 not satisf.	6 not known	
PERSONAL										
11 58%	8 42%		1. Overall personal appearance	3 16%	11 58%	5 26%				
12 63%	7 37%		2. Cleanliness	4 21%	11 58%	4 21%				
12 63%	7 37%		3. Grooming of hair, hands, and face	2 11%	10 53%	7 37%				
8 42%	11 58%		4. Taste in clothing and accessories	2 11%	9 47%	8 42%				
2 11%	8 42%	9 47%	5. Trimness of figure; weight?	5 26%	6 32%	8 42%				
3 16%	10 53%	6 32%	6. Posture; gracefulness of movement	3 16%	7 37%	8 42%	1 5%			
1 5%	14 74%	4 21%	7. Has good housing	1 5%	4 21%	4 21%			10 53%	
4 21%	13 68%	2 11%	8. Eats wholesome foods; proper diet	1 5%	2 11%				16 84%	
8 42%	10 53%	1 5%	9. Gets adequate sleep		4 21%	1 5%			14 74%	
8 42%	9 47%	2 11%	10. Wisely chooses friends		2 11%	3 16%		1 5%	13 68%	
2 11%	10 53%	7 37%	11. Has a church affiliation			1 5%			18 95%	
8 42%	8 42%	3 16%	12. Makes wise use of leisure time		1 5%	2 11%			16 84%	
3 16%	8 42%	8 42%	13. Is thrifty; buys wisely			1 5%			18 95%	
			14.							
			15.							
			16.							
82	123	42	Totals	14	74	52	1	1	105	
33%	50%	17%		6%	30%	21%	1%	1%	43%	

OCCUPATIONAL PROFICIENCY RATING SCALE

Jbl/12-59

page 4

IMPORTANCE OF ITEM EVALUATED TO JOB HELD			ITEM EVALUATED (employee trait, characteristic, achievement, or ability)	EVALUATION: RATING OF EMPLOYEE'S PERFORMANCE OR CONDITION						comments
very impt.	fairly impt.	not impt.		1 out- stdg.	2 very good	3 av. or satisf.	4 barely satisf.	5 not satisf.	6 not known	
			WORK HABITS							
17 89%	2 11%		1. Punctuality; arrives at work on time; prompt	3 16%	9 47%	7 37%				
11 58%	8 42%		2. Likes work, especially detail work		7 37%	9 47%		3 16%		
18 95%	1 5%		3. Follows directions, both oral and written	1 5%	11 58%	6 32%				
8 42%	10 53%	1 5%	4. Organizes and plans work; budgets time		5 26%	11 58%		3 16%		
11 58%	7 37%	1 5%	5. Does not need close supervision	3 16%	7 37%	7 37%	1 5%	1 5%		
8 42%	11 58%		6. Generally works rapidly		9 47%	9 47%	1 5%			
16 84%	3 16%		7. Works accurately; takes pride in perfection	1 5%	6 32%	12 63%				
15 74%	3 16%	1 5%	8. Asks relevant questions when necessary		9 47%	7 37%	2 11%	1 5%		
10 53%	9 47%		9. Accepts criticism gracefully and complies	4 21%	7 37%	7 37%		1 5%		
13 68%	6 32%		10. Has a good attitude toward supervision	4 21%	10 53%	5 26%				
4 21%	15 74%		11. Likes other employees	4 21%	7 37%	5 26%		3 16%		
5 26%	14 74%		12. Is liked by other employees	4 21%	8 42%	4 21%		3 16%		
9 47%	10 53%		13. Keeps area and materials clean, orderly		8 42%	10 53%	1 5%			
6 32%	13 68%		14. Conserves supplies and materials		6 32%	11 58%		2 11%		
11 58%	7 37%	1 5%	15. Can "overproduce" in emergency situations	1 5%	4 21%	7 37%		7 37%		
12 63%	7 37%		16. Establishes & meets work completion deadlines		5 26%	10 53%		4 21%		

OCCUPATIONAL PROFICIENCY RATING SCALE

jbl/12-59

IMPORTANCE OF ITEM EVALUATED TO JOB HELD			ITEM EVALUATED (employee trait, characteristic, achievement, or ability)	EVALUATION: RATING OF EMPLOYEE'S PERFORMANCE OR CONDITION						comments
very imp.	fairly imp.	not. imp.		1 out-stdg.	2 very good	3 av. or satisf.	4 barely satisf.	5 not satisf.	6 not known	
			WORK HABITS (continued)							
4 21%	13 68%	2 11%	17. Anticipates supervisory requests		2 11%	12 63%			5 26%	
14 74%	5 26%		18. Works to day's end; not a clock-watcher	5 26%	4 21%	9 47%			1 5%	
5 26%	11 58%	3 16%	19. Does not seek special treatment or favors	3 16%	6 32%	4 21%	1 5%		5 26%	
7 37%	12 63%		20. Willingly volunteers late work when needed	3 16%	5 26%	5 26%			6 32%	
13 68%	6 32%		21. AVOIDS TIME LOSS CAUSED BY: Idle chit-chat	6 32%	9 47%	1 5%			3 16%	
10 53%	7 37%	2 11%	22. Coffee break abuses	7 37%	2 11%				10 53%	
11 58%	7 37%	1 5%	23. Excess time in lounge or rest room	7 37%	5 26%				7 37%	
11 58%	6 32%	2 11%	24. Personal business and phone calls	7 37%	4 21%	1 5%			7 37%	
10 53%	6 32%	3 16%	25. Extended lunch periods	7 37%	1 5%				11 58%	
8 42%	9 47%	2 11%	26. Friends dropping in	7 37%	4 21%	1 5%			7 37%	
7 37%	11 58%	1 5%	27. DOES NOT ANNOY OTHERS WITH: Smoking	11 58%	4 21%	1 5%			3 16%	
10 53%	8 42%	1 5%	28. Gum chewing	9 47%	5 26%	3 16%			2 11%	
			29. Other:							
			30.							
			31.							
			32.							

284 227 21
53% 43% 4%

Totals, including previous page

97 169 164 7 95
18% 32% 31% 1% 18%

OCCUPATIONAL PROFICIENCY RATING SCALE

jbl/12-59

page 6

IMPORTANCE OF ITEM EVALUATED TO JOB HELD			ITEM EVALUATED (employee trait, characteristic, achievement, or ability)	EVALUATION: RATING OF EMPLOYEE'S PERFORMANCE OR CONDITION						comments
very imp.	fairly imp.	not imp.		1 out-stdg.	2 very good	3 av. or satisf.	4 barely satisf.	5 not satisf.	6 not known	
TYPING										
12 63%	7 31%		1. Overall typing productivity--manual machines		10 53%	9 47%				
6 32%	4 21%	9 47%	2. Overall typing productivity--electric		6 32%	3 16%			10 53%	
7 31%	10 53%	2 11%	3. Typing speed--straight copy	1 5%	7 31%	11 58%				
13 68%	6 32%		4. Typing accuracy--straight copy	1 5%	8 42%	10 53%				
2 11%	14 74%	3 16%	5. Typing speed--numbers, tabular, etc.		3 16%	11 58%			5 26%	
9 47%	8 42%	2 11%	6. Typing accuracy--numbers, tabular, etc.		3 16%	11 58%			5 26%	
7 31%	9 47%	3 16%	7. Proofreading speed; scans rapidly		3 16%	10 53%	2 11%		4 21%	
17 89%	2 11%		8. Proofreading accuracy; detects ALL errors		6 32%	9 47%	1 5%		3 16%	
11 58%	5 26%	3 16%	9. Erasing ability; quickly, neatly erases		5 26%	12 63%	1 5%		1 5%	
7 31%	9 47%	3 16%	10. Arrangement of work: artistic, original, functional, pleasing to the eye		6 32%	10 53%			3 16%	
5 26%	11 58%	3 16%	11. Machine maintenance: cleanliness, ribbon replacement, minor repairs		7 31%	6 32%			6 32%	
1 5%	7 31%	11 58%	12. Chain feeding ability: envelopes, labels, cards, etc.		2 11%	2 11%			15 79%	
			13.							
			14.							
			15.							

NOTE: Please use blank item spaces to list other items which are significant;

or, use available space for comments or suggestions.

97
43%

92
40%

39
17%

Totals

2
1%

66
29%

104
46%

4
2%

52
23%

OCCUPATIONAL PROFICIENCY RATING SCALE

jb1/12-59

page 7

IMPORTANCE OF ITEM EVALUATED TO JOB HELD			ITEM EVALUATED (employee trait, characteristic, achievement, or ability)	EVALUATION: RATING OF EMPLOYEE'S PERFORMANCE OR CONDITION						comments
very impt.	fairly impt.	not impt.		1 out-stdg.	2 very good	3 av. or satisf.	4 barely satisf.	5 not satisf.	6 not known	
SHORTHAND AND TRANSCRIPTION										
6 32%	5 26%	8 42%	1. Overall shorthand-transcription production		5 26%	4 21%			10 53%	
4 21%	7 37%	8 42%	2. Shorthand writing speed	1 5%	5 26%	3 16%			10 53%	
1 5%	6 32%	12 63%	3. Non-interruption of dictator	1 5%	6 32%	1 5%			11 58%	
	2 11%	17 89%	4. Takes notes in non-office setting; (on tours, inspection trips, etc.)			1 5%			18 95%	
7 37%	5 26%	7 37%	5. Transcription speed		4 21%	6 32%			9 47%	
10 53%	2 11%	7 37%	6. Transcription accuracy	1 5%	4 21%	4 21%	1 5%		9 47%	
	7 37%	12 63%	7. Ability to write shorthand notes so that others may transcribe therefrom		2 11%	2 11%			15 79%	
	8 42%	11 58%	8. Ability to transcribe notes of others		1 5%	1 5%			17 89%	
1 5%	7 37%	11 58%	9. Familiarity with common terms and jargon		2 11%	2 11%			15 79%	
2 11%	8 42%	9 47%	10. Ability to transcribe from "cold" notes		2 11%		1 5%		16 84%	
			11.							
31 16%	57 30%	102 54%	Totals	3 2%	32 17%	24 13%	2 1%		129 68%	
VOICE WRITING										
	4 21%	15 79%	1. Operation of _____ (insert trade name of machine)						19 100%	
1 5%	4 21%	14 74%	2. Typing production from voice sources						19 100%	
			3.							

1 3%
8 21%
29 76%

Totals

38
100%

OCCUPATIONAL PROFICIENCY RATING SCALE

jbl/12-59

page 8

IMPORTANCE OF ITEM EVALUATED TO JOB HELD			ITEM EVALUATED (employee trait, characteristic, achievement, or ability)	EVALUATION: RATING OF EMPLOYEE'S PERFORMANCE OR CONDITION						comments
very imp.	fairly imp.	not imp.		1 out-stdg.	2 very good	3 av. or satisf.	4 barely satisf.	5 not satisf.	6 not known	
			ENGLISH; oral and written communication							
8 42%	11 58%		1. Overall speaking ability		2 11%	17 89%				
8 42%	11 58%		2. Use of proper English when speaking		4 21%	14 74%	1 5%			
5 26%	14 74%		3. Has a good speaking vocabulary		2 11%	14 74%	2 11%		1 5%	
10 53%	9 47%		4. Speaks loudly enough to be heard		6 32%	7 37%	6 32%			
9 47%	9 47%	1 5%	5. Pronounces words correctly, enunciates clearly, speaks without accent		4 21%	12 63%	2 11%		1 5%	
8 42%	11 58%		6. Has a pleasing voice and manner		8 42%	8 42%	3 16%			
4 21%	12 63%	3 16%	7. Has good eye contact; at ease when speaking		7 37%	9 47%	2 11%		1 5%	
2 11%	14 74%	3 16%	8. Functions well as receptionist or guide		3 16%	7 37%	2 11%		7 37%	
9 47%	6 32%	4 21%	9. Uses telephone capably	1 5%	3 16%	6 32%	1 5%		8 42%	
7 37%	7 37%	5 26%	10. Uses proper English in writing		3 16%	6 32%		1 5%	9 47%	
3 16%	11 58%	5 26%	11. Has a good writing vocabulary		1 5%	6 32%		1 5%	11 58%	
4 21%	9 47%	6 32%	12. Can compose a good memo or business letter		2 11%	3 16%			14 74%	
10 53%	7 37%	2 11%	13. Spells well		6 32%	6 32%	2 11%		5 26%	
13 68%	4 21%	2 11%	14. Punctuates, capitalizes, abbreviates properly		5 26%	9 47%	2 11%		3 16%	
7 37%	10 53%	2 11%	15. Penmanship; writes legibly and neatly		6 32%	4 21%	2 11%		7 37%	
			16.							

120 154 68
35% 45% 20%

Totals, including addenda from page 13

1 69 136 27 2 107
1% 20% 40% 8% 1% 31%

OCCUPATIONAL PROFICIENCY RATING SCALE

jbl/12-59

page 9

IMPORTANCE OF ITEM EVALUATED TO JOB HELD			ITEM EVALUATED (employee trait, characteristic, achievement, or ability)	EVALUATION: RATING OF EMPLOYEE'S PERFORMANCE OR CONDITION						comments
very imp.	fairly imp.	not. imp.		1 out-stdg.	2 very good	3 av. or satisf.	4 barely satisf.	5 not satisf.	6 not known	
BOOKKEEPING AND ACCOUNTING										
2	11%	5 26%	12 63%	1. General bookkeeping & accounting proficiency			5 26%		14 74%	
		5 26%	14 74%	2. Speed in doing bookkeeping & accounting work	1 5%	4 21%			14 74%	
4	21%	3 16%	12 63%	3. Accuracy in doing bookkeeping & accounting	1 5%	3 16%			15 79%	
5	26%	2 11%	12 63%	4. Understanding of simple records	2 11%	2 11%			15 79%	
1	5%	4 21%	14 74%	5. Understanding of complex records		2 11%			17 89%	
3	16%	1 5%	15 79%	6. Understanding of the bookkeeping cycle	1 5%	1 5%			17 89%	
2	11%		17 89%	7. Ability to analyze business transactions and to journalize same	2 11%				17 89%	
4	21%	2 11%	13 68%	8. Ability to post rapidly and accurately		3 16%			16 84%	
2	11%	1 5%	16 84%	9. Computation of accounts receivable & payable		2 11%			17 89%	
2	11%	2 11%	15 79%	10. Ability to prepare work sheets	2 11%				17 89%	
2	11%	1 5%	16 84%	11. Preparation of financial statements		2 11%			17 89%	
2	11%	1 5%	16 84%	12. Preparation of statements of account		2 11%			17 89%	
2	11%		17 89%	13. Proficiency in payroll accounting					19 100%	
1	5%		18 95%	14. Proficiency in tax accounting					19 100%	
3	16%		16 84%	15. Ability to detect accounting errors	1 5%	1 5%			17 89%	
2	11%	1 5%	16 84%	16. Preparation of bank checks & stubs	2 11%				17 89%	
2	11%	1 5%	16 84%	17. Reconciliation of bank statements	2 11%				17 89%	
				18.						
				19.						

39
12%

29
9%

255
79%

Totals

14
4%

27
8%

282
87%

OCCUPATIONAL PROFICIENCY RATING SCALE

Jb1/12-59

IMPORTANCE OF ITEM EVALUATED TO JOB HELD			ITEM EVALUATED (employee trait, characteristic, achievement, or ability)	EVALUATION: RATING OF EMPLOYEE'S PERFORMANCE OR CONDITION						comments							
very imp.	fairly imp.	not imp.		1 out-stgd.	2 very good	3 av. or satisf.	4 barely satisf.	5 not satisf.	6 not known								
BUSINESS MATHEMATICS																	
2	11%	4	21%	13	68%	1.	Overall business arithmetic production	2	11%	4	21%				13	68%	
3	16%	6	32%	10	53%	2.	Knowledge of the four basic math processes	1	5%	5	26%	2	11%		11	58%	
		7	37%	12	63%	3.	Arithmetic speed	2	11%	4	21%				13	68%	
4	21%	4	21%	11	58%	4.	Arithmetic accuracy	2	11%	4	21%				13	68%	
3	16%	8	42%	8	42%	5.	Numbers penmanship; writes neatly, legibly	3	16%	5	26%	1	5%		10	53%	
				19	100%	6.	Ability to convert problem situations to numerical terms and to solve them					2	11%		17	89%	
		3	16%	16	84%	7.	Ability to do abstract reasoning			2	11%		2	11%	15	79%	
				19	100%	8.	Computation of discount periods & discounts								19	100%	
1	5%	4	21%	14	74%	9.	Computation of percentage			2	11%				17	89%	
		3	16%	16	84%	10.	Fractions, knowledge and use of								19	100%	
		1	5%	18	95%	11.	Ratios, knowledge and use of								19	100%	
3	16%	4	21%	12	63%	12.	Decimal point usage	2	11%			1	5%	1	5%	15	79%
				19	100%	13.	Depreciation computation								19	100%	
		1	5%	18	95%	14.	Preparation of graphs, and understanding same								19	100%	
		2	11%	17	89%	15.	Computation of interest			2	11%				17	89%	
						16.											
						17.											
						18.											
16	47	222			Totals			12	28	6	3	236					
6%	16%	78%						4%	10%	2%	1%	83%					

OCCUPATIONAL PROFICIENCY RATING SCALE

jbl/12-59

page 11

IMPORTANCE OF ITEM EVALUATED TO JOB HELD			ITEM EVALUATED (employee trait, characteristic, achievement, or ability)	EVALUATION: RATING OF EMPLOYEE'S PERFORMANCE OR CONDITION						comments
very imp.	fairly imp.	not imp.		1 out-stdg.	2 very good	3 av. or satisf.	4 barely satisf.	5 not satisf.	6 not known	
			BUSINESS LAW							
	1 5%	18 95%	1. Overall knowledge of business law						19 100%	
	2 11%	17 89%	2. Knowledge of elementary contract law						19 100%	
	2 11%	17 89%	3. Knowledge of buyer-seller legal relations			2 11%			17 89%	
	1 5%	18 95%	4. Knowledge of employer-employee legal relations						19 100%	
		19 100%	5. Knowledge of negotiable instruments law						19 100%	
	1 5%	18 95%	6. Knowledge of elementary insurance law						19 100%	
		19 100%	7. Knowledge of motor vehicle laws						19 100%	
2 11%		17 89%	8. Knowledge of debtor-creditor relations			2 11%			17 89%	
		19 100%	9. Knowledge of elementary property law						19 100%	
	3 16%	16 84%	10. Knowledge of the law of business organization						19 100%	
			11.							
2 11%	10 5%	178 99%	Totals			4 2%			186 98%	
			ADDING MACHINES AND CALCULATORS							
1 5%	8 42%	10 53%	1. Skilled operation of full-keyboard adding listing machine:	2 11%	4 21%				13 68%	
2 11%	4 21%	13 68%	2. Skilled operation of ten-key adding listing machine:	2 11%	2 11%				15 79%	
1 5%	3 16%	15 79%	3. Skilled operation of rotary calculating machine:	2 11%	1 5%				16 84%	
	3 16%	16 84%	4. Skilled operation of key-driven calculator:	2 11%	1 5%				16 84%	
			5.							
7 7%	25 26%	63 66%	Totals, including addenda from page 13		10 11%	12 13%			73 77%	

OCCUPATIONAL PROFICIENCY RATING SCALE

jbl/12-59

page 12

IMPORTANCE OF ITEM EVALUATED TO JOB HELD			ITEM EVALUATED (employee trait, characteristic, achievement, or ability)	EVALUATION: RATING OF EMPLOYEE'S PERFORMANCE OR CONDITION						comments
very imp.	fairly imp.	not imp.		1 out-stdg.	2 very good	3 av. or satisf.	4 barely satisf.	5 not satisf.	6 not known	
DUPLICATING MACHINES.										
6 32%	9 47%	4 21%	1. Cutting of ink-type duplicator stencils		2 11%	9 47%			8 42%	
3 16%	8 42%	8 42%	2. Typing of spirit-type duplicator master sheets		1 5%	7 37%			11 58%	
6 32%	5 26%	8 42%	3. Operation of _____ ink-type duplicating machines (insert name & model)		4 21%	3 16%			12 63%	
3 16%	5 26%	11 58%	4. Operation of _____ spirit-type duplicating machines (insert name & model)		2 11%	2 11%			15 79%	
1 5%	3 16%	15 79%	5. Operation of _____ photo-static copiers (insert name & model)						19 100%	
1 5%	6 32%	12 63%	6. Use of drawing board, stylus, and plates in stencil preparation			1 5%			18 95%	
5 26%	7 37%	7 37%	7. Makes good corrections on stencils		2 11%	6 32%	1 5%		10 53%	
4 21%	4 21%	11 58%	8. Makes good corrections on spirit masters		1 5%	4 21%			14 74%	
5 26%	7 37%	7 37%	9. Keeps machines clean and in good condition		2 11%	5 26%	1 5%		11 58%	
2 11%	10 53%	7 37%	10. Keeps self and clothes clean in operation		2 11%	4 21%	1 5%		12 63%	
8 42%	4 21%	7 37%	11. Turns out clean, attractive, unsmudged work		3 16%	5 26%			11 58%	
8 42%	4 21%	7 37%	12. Assembles duplicated work neatly and in proper order; staples work neatly		4 21%	6 32%			9 47%	
7 37%	7 37%	5 26%	13. Does not waste stencils, masters, or paper		6 32%	5 26%			8 42%	
			14.							

NOTE: If more space is needed for comments, please use reverse sides of rating sheets--being careful to identify item numbers. Specify weaknesses. Intelligent criticism is sought. The curriculum cannot be improved without specific complaints. Be candid. Be blunt. Call a spade a spade.

59 80 108
24% 32% 44%

Totals

29 58 4 156
12% 24% 1% 63%

OCCUPATIONAL PROFICIENCY RATING SCALE

jb1/12-59

page 13

IMPORTANCE OF ITEM EVALUATED TO JOB HELD			ITEM EVALUATED (employee trait, characteristic, achievement, or ability)	EVALUATION: RATING OF EMPLOYEE'S PERFORMANCE OR CONDITION						comments
very imp.	fairly imp.	not imp.		1 out-stdg.	2 very good	3 av. or satisf.	4 barely satisf.	5 not satisf.	6 not known	
			ADDENDA; ENGLISH							
11 58%	6 32%	2 11%	17. Filing skills: speed, accuracy, production		7 37%	8 42%	1 5%		3 16%	
2 11%	2 11%	15 79%	18. Competence in telegram composition				1 5%		18 95%	
	1 5%	18 95%	19. Ability to read land description maps						19 100%	
			ADDENDA; ADDING MACHINES AND CALCULATORS							
3 16%	8 42%	8 42%	6. Ability to change tapes, change ribbons, make minor repairs		2 11%	4 21%	1 5%		12 63%	
			ADDENDA; OTHER							

OFFICE PRACTICE SUPERVISORS PLEASE NOTE: After completing all pages of the Occupational Proficiency Rating Scale, the Estimate of Instructional Efficiency, and the Instructional Area Time Allotment Evaluation--please again scan through the entire questionnaire, MARKING IN RED PENCIL OR INK any corrections, deletions, additions, or comments which might make it more effective as seen from the eyes of a full-time supervisor or employer.

Please use the reverse side of this page for constructive criticism of the conduct of the Office Practice survey, and the proposed conduct of the Employer Survey. Remarks, however bitter or cynical, will be appreciated. Suggestions for eliciting employer response will be especially helpful.

APPENDIX C

Statement of Purposes and Functions
of the Office Practice Program

January 20, 1960

OFFICE PRACTICE PROGRAM
Commercial Department--Haskell Institute

- Purpose:
1. To give the students an opportunity to apply knowledge acquired in the classroom to actual office situations.
 2. To give the students an opportunity to work under the supervision of employees other than their classroom teachers.
 3. To give teachers bases for remedial work.
 4. To acquaint the students with day-to-day operation of an office.
 5. To teach students the importance of good personal characteristics as well as technical knowledge.
- Function:
1. Office practice supervisors give students as great a variety of actual office experience as possible. This may include filing, typewriting, shorthand and transcription, composition, reception work, answering telephone, accounting, and operation of business machines.
 2. Prospective graduates are assigned to offices on at least an hour-day basis for nine weeks.

(s) MLN

APPENDIX D

Part I Results

Occupational Proficiency Rating Scales

Extreme items ranked in each section according to:

Importance, based on frequencies
of "very important" responses

Unimportance, based on frequencies
of "not important" responses

Unimportance, based on frequencies
of "not known" responses

Good Performance, based on frequencies
of "above average" responses

Poor Performance, based on frequencies
of "below average" responses

Occupational Proficiency Rating Scales -- Part I

 Rank Order Listing of Extreme Items in the "General Characteristics" Section, According to Frequency of "Very Important" Responses

rank	item	number "very impnt." responses	per cent
1	attendance regularity (3)	18	95%
2	dependability; reliability (9)	16	84%
3	alertness; intelligence; analytical ability (2)	15	79%
4	common sense; judgment (5)	15	79%
5	honesty; integrity; character (15)	15	79%

Rank Order Listing of Extreme Items in the "General Characteristics" Section, According to Frequency of "Not Important" Responses

rank	item	number "not impnt." responses	per cent
1	leadership abilities; dominance (17)	10	53%
2	creativity; imagination (8)	9	47%
3	self-expression; extroversion; assertiveness (26)	5	26%
4	desire for self-improvement and promotion (10)	4	21%
5	physical quickness; mobility, agility (22)	4	21%

Rank Order Listing of Extreme Items in the "General Characteristics" Section, According to Frequency of "Not Known" Responses

rank	item	number "not known" responses	per cent
1	desire for self-improvement and promotion (10)	10	53%
2	creativity; imagination (8)	9	47%
3	leadership abilities; dominance (17)	9	47%
4	poise; stability when under stress (23)	5	26%

Occupational Proficiency Rating Scales -- Part I

Rank Order Listing of Extreme Items in the "General Characteristics" Section, According to Frequency of "Above Average Performance" Responses

rank	item	number "outstdg." or "very good" responses	per cent
1	attendance regularity (3)	15	79%
2	honesty; integrity; character (15)	14	74%
3	cheerfulness; pleasantness (4)	13	68%
4	adaptability (1)	13	68%

Rank Order Listing of Extreme Items in the "General Characteristics" Section, According to Frequency of "Below Average Performance" Responses

rank	item	number "barely satis- factory" & "not satis- factory" responses	per cent
1	friendliness; ease in meeting people (13)	4	21%
2	self-expression; extroversion assertiveness (26)	3	16%
3	sense of humor (27)	3	16%
4	enthusiasm; spirit; zeal; zest (12)	3	16%

Occupational Proficiency Rating Scales -- Part I

 Rank Order Listing of Extreme Items in the "Personal" Section, According to Frequency of "Very Important" Responses

rank	item	number "very impt." responses	per cent
1	cleanliness (2)	12	63%
2	grooming of hair, hands, and face (3)	12	63%
3	overall personal appearance (1)	11	58%
4	taste in clothing and accessories (4)	8	42%
5	gets adequate sleep (9)	8	42%
6	wisely chooses friends (10)	8	42%
7	makes wise use of leisure time (12)	8	42%

Rank Order Listing of Extreme Items in the "Personal" Section, According to Frequency of "Not Important" Responses

rank	item	number "not impt." responses	per cent
1	trimness of figure; weight (5)	9	47%
2	is thrifty; buys wisely (13)	8	42%
3	has a church affiliation (11)	7	37%
4	posture; gracefulness of movement (6)	6	32%
5	has good housing (4)	4	21%

Rank Order Listing of Extreme Items in the "Personal" Section, According to Frequency of "Not Known" Responses

rank	item	number "not known" responses	per cent
1	has a church affiliation (11)	18	95%
2	is thrifty; buys wisely (13)	18	95%
3	eats wholesome foods; proper diet (8)	16	84%
4	makes wise use of leisure time (12)	16	84%
5	gets adequate sleep (9)	14	74%

Occupational Proficiency Rating Scales -- Part I

 Rank Order Listing of Extreme Items in the "Personal" Section, According to Frequency of "Above Average Performance" Responses

rank	item	number "outstdg." or "very good" responses	per cent
1	cleanliness (2)	15	79%
2	overall personal appearance (1)	14	74%
3	grooming of hair, hands, and face (3)	12	63%
4	trimness of figure; weight (5)	11	58%
5	taste in clothing and accessories (4)	11	58%

Rank Order Listing of Extreme Items in the "Personal" Section, According to Frequency of "Below Average Performance" Responses

rank	item	number "barely satis- factory" & "not satis- factory" responses	per cent
1	wisely chooses friends (10) (All other items were rated average or better.)	1	5%

Occupational Proficiency Rating Scales -- Part I

 Rank Order Listing of Extreme Items in the "Work Habite"
 Section, According to Frequency of "Very Important" Responses

rank	item	number "very impnt." responses	per cent
1	follows directions, both oral and written (3)	18	95%
2	punctuality; arrives at work on time; prompt (1)	17	89%
3	works accurately; takes pride in perfection (7)	16	84%
4	asks relevant questions when necessary (8)	15	79%
5	works to day's end; not a clock-watcher (18)	14	74%

 Rank Order Listing of Extreme Items in the "Work Habits"
 Section, According to Frequency of "Not Important" Responses

rank	item	number "not impnt." responses	per cent
1	does not seek special treatment (19)	3	16%
2	avoids time loss caused by: extended lunch periods (25)	3	16%
3	anticipates supervisory requests (17)	2	11%
4	avoids time loss caused by: friends dropping in (26)	2	11%
5	coffee break abuses (22)	2	11%
6	personal business and phone calls (24)	2	11%

 Rank Order Listing of Extreme Items in the "Work Habite"
 Section, According to Frequency of "Not Known" Responses

rank	item	number "not known" responses	per cent
1	avoids time loss caused by: extended lunch periods (25)	11	58%
2	coffee break abuses (22)	10	53%
3	can "overproduce" in emergency situations (15)	7	37%
4	avoids time loss caused by: time in lounge or rest room (23)	7	37%
5	personal business and phone calls (24)	7	37%
6	friends dropping in (26)	7	37%

Occupational Proficiency Rating Scales -- Part I

 Rank Order Listing of Extreme Items in the "Work Habits" Section, According to Frequency of "Above Average Performance" Responses

rank	item	number "outstdg." or "very good" responses	per cent
1	does not annoy others with smoking (27)	15	79%
2	avoids time loss caused by idle chit-chat (21)	15	79%
3	does not annoy others with gum chewing (28)	14	74%
4	has a good attitude toward supervision (10)	14	74%
5	avoids time loss caused by excess time in lounge or rest room (23)	12	63%
6	is liked by other employees (12)	12	63%
7	punctuality; arrives at work on time (1)	12	63%

 Rank Order Listing of Extreme Items in the "Work Habits" Section, According to Frequency of "Below Average Performance" Responses

rank	item	number "barely satis- factory" & "not satis- factory" responses	per cent
1	asks relevant questions when necessary (8)	2	11%
2	keeps area and materials clean, orderly (13)	1	5%
3	generally works rapidly (6)	1	5%
4	does not seek special treatment (19)	1	5%
5	does not need close supervision (5)	1	5%

Occupational Proficiency Rating Scales -- Part I

 Rank Order Listing of Extreme Items in the "Typing"
 Section, According to Frequency of "Very Important" Responses

rank	item	number "very impnt." responses	per cent
1	proofreading accuracy; detecte ALL errors (8)	17	89%
2	typing accuracy--straight copy (4)	13	68%
3	overall typing productivity--manual machines (1)	12	63%
4	erasing ability; quickly, neatly erases (9)	11	58%

 Rank Order Listing of Extreme Items in the "Typing"
 Section, According to Frequency of "Not Important" Responses

rank	item	number "not impnt." responses	per cent
1	chain feeding ability; envelopes labels, cards, etc. (12)	11	58%
2	overall typing productivity--electric (2)	9	47%
3	typing speed--numbers, tabular, etc. (5)	3	16%
4	machine maintenance; cleanliness etc. (11)	3	16%
5	proofreading speed; scans rapidly (7)	3	16%
6	arrangement of work: artistic, etc. (10)	3	16%
7	erasing ability; quickly, neatly erases (9)	3	16%

(NOTE: All items above except the first two received more "very important" responses than "not important" responses)

 Rank Order Listing of Extreme Items in the "Typing"
 Section, According to Frequency of "Not Known" Responses

rank	item	number "not known" responses	per cent
1	chain feeding ability; envelopes, labels, cards, etc. (12)	15	79%
2	overall typing productivity--electric (2)	10	53%
3	machine maintenance; cleanliness, etc. (11)	6	32%
4	typing speed--numbers, tabular, etc. (5)	5	26%
5	typing accuracy--numbers, tabular, etc. (6)	5	26%

Occupational Proficiency Rating Scales -- Part I

 Rank Order Listing of Extreme Items in the "Typing"
 Section, According to Frequency of "Above Average Performance" Responses

rank	item	number "outstdg." or "very good" responses	per cent
1	overall typing productivity--manual (1)	10	53%
2	typing accuracy--straight copy (4)	9	47%
3	typing speed--straight copy (3)	8	42%
4	machine maintenance: cleanliness, etc. (11)	7	37%

 Rank Order Listing of Extreme Items in the "Typing"
 Section, According to Frequency of "Below Average Performance" Responses

rank	item	number "barely satis- factory" & "not satis- factory" responses	per cent
1	proofreading speed; scans rapidly (7)	2	11%
2	proofreading accuracy; detects ALL errors (8)	1	5%
3	erasing ability; quickly, neatly erases (9)	1	5%

Occupational Proficiency Rating Scales -- Part I

 Rank Order Listing of Extreme Items in the "Shorthand and Transcription" Section, According to Frequency of "Very Important" Responses

rank	item	number "very impnt." responses	per cent
1	transcription accuracy (6)	10	53%
2	transcription speed (5)	7	37%
3	overall shorthand-transcription production (1)	6	32%
4	shorthand writing speed (2)	4	21%

Rank Order Listing of Extreme Items in the "Shorthand and Transcription" Section, According to Frequency of "Not Important" Responses

rank	item	number "not impnt." responses	per cent
1	takes notes in non-office setting; on tours, inspection trips (4)	17	89%
2	ability to write shorthand notes so others may transcribe therefrom (7)	12	63%
3	non-interruption of dictator (3)	12	63%
4	ability to transcribe notes of others (8)	11	58%
5	familiarity with common terms and jargon (9)	11	58%

Rank Order Listing of Extreme Items in the "Shorthand and Transcription" Section, According to Frequency of "Not Known" Responses

rank	item	number "not known" responses	per cent
1	takes notes in non-office setting; on tours, inspection trips (4)	18	95%
2	ability to transcribe notes of others (8)	17	89%
3	ability to transcribe from "cold" notes (10)	16	84%
4	ability to write shorthand notes so others may transcribe therefrom (7)	15	79%
5	familiarity with common terms and jargon (9)	15	79%

Occupational Proficiency Rating Scales -- Part I

 Rank Order Listing of Extreme Items in the "Shorthand and Transcription" Section, According to Frequency of "Above Average Performance" Responses

rank	item	number "outstdg." or "very good" responses	per cent
1	non-interruption of dictator (3)	7	37%
2	shorthand writing speed (2)	6	32%
3	transcription accuracy (6)	5	26%
4	overall shorthand-transcription production (1)	5	26%

Rank Order Listing of Extreme Items in the "Shorthand and Transcription" Section, According to Frequency of "Below Average Performance" Responses

rank	item	number "barely satis- factory" & "not satis- factory" responses	per cent
1	transcription accuracy (6)	1	5%
2	ability to transcribe from "cold" notes (10)	1	5%

Occupational Proficiency Rating Scales -- Part I

 Rank Order Listing of Extreme Items in the "Voice Writing" Section, According to Frequency of "Very Important" Responses

rank	item	number "very impnt." responses	per cent
1	typing production from voice sources (2)	1	5%

(NOTE: Both items 1 and 2 were considered "fairly important" on four returns--21%)

Rank Order Listing of Extreme Items in the "Voice Writing" Section, According to Frequency of "Not Important" Responses

rank	item	number "not impnt." responses	per cent
1	operation of _____ (insert trade name of machine) (1)	15	79%
2	typing production from voice sources (2)	14	74%

Rank Order Listing of Extreme Items in the "Voice Writing" Section, According to Frequency of "Not Known" Responses

rank	item	number "not known" responses	per cent
1	operation of _____ (insert trade name of machine) (1)	19	100%
2	typing production from voice sources (2)	19	100%

Rank Order Listing of Extreme Items in the "Voice Writing" Section, According to Frequency of "Above Average Performance" Responses

Not determinable since all responses were "not known" responses.

Rank Order Listing of Extreme Items in the "Voice Writing" Section, According to Frequency of "Below Average Performance" Responses

Not determinable since all responses were "not known" responses.

Occupational Proficiency Rating Scales -- Part I

Rank Order Listing of Extreme Items in the "Business English" Section, According to Frequency of "Very Important" Responses

rank	item	number "very impnt." responses	per cent
1	punctuates, capitalizes, abbreviates properly (14)	13	68%
2	filing skills; speed, accuracy, production (17)	11	58%
3	speaks loudly enough to be heard (4)	10	53%
4	spells well (13)	10	53%
5	pronounces words correctly, enunciates clearly, speaks without accent (5)	9	47%
6	uses telephone capably (9)	9	47%

Rank Order Listing of Extreme Items in the "Business English" Section, According to Frequency of "Not Important" Responses

rank	item	number "not impnt." responses	per cent
1	ability to read land description maps (19)	18	95%
2	competence in telegram composition (18)	15	79%
3	can compose a good memo or business letter (12)	6	32%
4	has a good writing vocabulary (11)	5	26%
5	uses proper English in writing (10)	5	26%

Rank Order Listing of Extreme Items in the "Business English" Section, According to Frequency of "Not Known" Responses

rank	item	number "not known" responses	per cent
1	ability to read land description maps (19)	19	100%
2	competence in telegram composition (18)	18	95%
3	can compose a good memo or business letter (12)	14	74%
4	has a good writing vocabulary (11)	11	58%
5	uses proper English in writing (10)	9	47%

Occupational Proficiency Rating Scales -- Part I

 Rank Order Listing of Extreme Items in the "Business English" Section, According to Frequency of "Above Average Performance" Responses

rank	item	number "outstdg." or "very good" responses	per cent
1	has a pleasing voice and manner (6)	8	42%
2	has good eye contact; speaks easily (7)	7	37%
3	filing skills: speed, accuracy, etc. (17)	7	37%
4	speaks loudly enough to be heard (4)	6	32%
5	spells well (13)	6	32%
6	penmanship; writes legible, neatly (15)	6	32%

(NOTE: Item 9 received one "outstanding" response—5%; all other above-average responses were in the "very good" column.)

Rank Order Listing of Extreme Items in the "Business English" Section, According to Frequency of "Below Average Performance" Responses

rank	item	number "barely satis- factory" & "not satis- factory" responses	per cent
1	speaks loudly enough to be heard (4)	6	32%
2	has a pleasing voice and manner (6)	3	16%
3	uses proper English in writing (10)	1*	5%
4	has a good writing vocabulary (11) *(not satisfactory)	1*	5%

(NOTE: The following items each were given two "barely satisfactory" responses—11%: items 3,5,7,8,13,14,15)

Occupational Proficiency Rating Scales -- Part I

Rank Order Listing of Extreme Items in the "Bookkeeping and Accounting" Section, According to Frequency of "Very Important" Responses

rank	item	number "very impnt." responses	per cent
1	understanding of simple records (4)	5	26%
2	accuracy in doing bookkeeping and accounting (3)	4	21%
3	ability to post rapidly and accurately (8)	4	21%
4	understanding of the bookkeeping cycle (6)	3	16%
5	ability to detect accounting errors (15)	3	16%

Rank Order Listing of Extreme Items in the "Bookkeeping and Accounting" Section, According to Frequency of "Not Important" Responses

rank	item	number "not impnt." responses	per cent
1	proficiency in tax accounting (14)	18	95%
2	ability to analyze business transactions and to journalize same (7)	17	89%
3	proficiency in payroll accounting (13)	17	89%

(NOTE: The following six items each received 16 "not important" responses--84%: items 9, 11, 12, 15, 16, 17. No item in the section received fewer than 12--63%--"not important" responses.)

Rank Order Listing of Extreme Items in the "Bookkeeping and Accounting" Section, According to Frequency of "Not Known" Responses

rank	item	number "not known" responses	per cent
1	proficiency in payroll accounting (13)	19	100%
2	proficiency in tax accounting (14)	19	100%

(NOTE: Ten items each received 17--89%--"not known" responses; note also that not less than 14 responses--74%--were in the "not known" category for any item.)

Occupational Proficiency Rating Scales -- Part I

 Rank Order Listing of Extreme Items in the "Bookkeeping and Accounting" Section, According to Frequency of "Above Average Performance" Responses

rank	item	number "outstdg." or "very good" responses	per cent
1	understanding of simple records (4)	2	11%
2	ability to analyze business transactions and to journalize same (7)	2	11%
3	ability to prepare work sheets (10)	2	11%
4	preparation of bank checks and stubs (16)	2	11%
5	reconciliation of bank statements (17)	2	11%

(NOTE: No responses were in the "outstanding" category.)

Rank Order Listing of Extreme Items in the "Bookkeeping and Accounting" Section, According to Frequency of "Below Average Performance" Responses

There were no responses in below average categories.

Occupational Proficiency Rating Scales -- Part I

Rank Order Listing of Extreme Items in the "Business Mathematics" Section, According to Frequency of "Very Important" Responses

rank	item	number "very impnt." responses	per cent
1	arithmetic accuracy (4)	4	21%
2	numbers penmanship; writes neatly etc. (5)	3	16%
3	knowledge of the four basic math processes (2)	3	16%
4	decimal point usage (12)	3	16%
5	overall business arithmetic production (1)	2	11%

Rank Order Listing of Extreme Items in the "Business Mathematics" Section, According to Frequency of "Not Important" Responses

rank	item	number "not impnt." responses	per cent
1	ability to convert problem situations to numerical terms and solve (6)	19	100%
2	computation of discount periods and discounts (8)	19	100%
3	depreciation computation (13)	19	100%
4	ratios, knowledge and use of (11)	18	95%
5	preparation of graphs, and understanding same (14)	18	95%

(NOTE: No item received fewer than 8--42%--"not important" responses.)

Rank Order Listing of Extreme Items in the "Business Mathematics" Section, According to Frequency of "Not Known" Responses

rank	item	number "not known" responses	per cent
1	computation of discount periods and discounts (8)	19	100%
2	fractions, knowledge and use of (10)	19	100%
3	ratios, knowledge and use of (11)	19	100%
4	depreciation computation (13)	19	100%
5	preparation of graphs, and understanding same (14)	19	100%

(NOTE: No item received fewer than 10--53%--"not known" responses.)

Occupational Proficiency Rating Scales -- Part I

 Rank Order Listing of Extreme Items in the "Business Mathematics" Section, According to Frequency of "Above Average Performance" Responses

rank	item	number "outstdg." or "very good" responses	per cent
1	numbers penmanship; writes neatly, etc. (5)	3	16%
2	overall business arithmetic production (1)	2	11%
3	arithmetic speed (3)	2	11%
4	arithmetic accuracy (4)	2	11%
5	decimal point usage (12)	2	11%

Rank Order Listing of Extreme Items in the "Business Mathematics" Section, According to Frequency of "Below Average Performance" Responses

rank	item	number "barely satis- factory" & "not satis- factory" responses	per cent
1	ability to do abstract reasoning (7)	2*	11%
2	decimal point usage (12)	2**	11%
3	knowledge of the four basic math processes (2)	2	11%
4	ability to convert problem situations to numerical terms and solve (6)	2	11%
5	numbers penmanship; writes neatly, etc. (5) *("not satisfactory") **(includes one "not satisfactory" response)	1	5%

Occupational Proficiency Rating Scales -- Part I

 Rank Order Listing of Extreme Items in the "Business Law" Section, According to Frequency of "Very Important" Responses

rank	item	number "very impt." responses	per cent
1	knowledge of debtor-creditor relations (8)	2	11%
(NOTE: Item 10 received three "fairly important" responses--16%; items 2 and 3 each received two "fairly important" responses--11%; items 1, 4, and 6 each received one "fairly important" response--5%.)			

Rank Order Listing of Extreme Items in the "Business Law" Section, According to Frequency of "Not Important" Responses

rank	item	number "not impt." responses	per cent
1	knowledge of negotiable instruments law (5)	19	100%
2	knowledge of motor vehicle laws (7)	19	100%
3	knowledge of elementary property law (9)	19	100%
4	overall knowledge of business law (1)	18	95%
5	knowledge of employer-employee legal relations (4)	18	95%
6	knowledge of elementary insurance law (6)	18	95%

Rank Order Listing of Extreme Items in the "Business Law" Section, According to Frequency of "Not Known" Responses

With the following exceptions, every response to every item was a "not known" response:

- Item 3, knowledge of buyer-seller legal relations received two "average or satisfactory" ratings, (11%), and
 Item 8, knowledge of debtor-creditor relations received two "average or satisfactory" ratings, (11%).
-

Occupational Proficiency Rating Scales -- Part I

Rank Order Listing of Extreme Items in the "Business Law"
Section, According to Frequency of "Above Average Performance" Responses

There were no responses in the above average categories.

Rank Order Listing of Extreme Items in the "Business Law"
Section, According to Frequency of "Below Average Performance" Responses

There were no responses in the below average categories.

Occupational Proficiency Rating Scales -- Part I

 Rank Order Listing of Extreme Items in the "Adding Machines & Calculators" Section, According to Frequency of "Very Important" Responses

rank	item	number "very impnt." responses	per cent
1	ability to change tapes, change ribbons, make minor repairs (6)	3	16%
2	skilled operation of ten-key adding listing machine (2)	2	11%

Rank Order Listing of Extreme Items in the "Adding Machines & Calculators" Section, According to Frequency of "Not Important" Responses

rank	item	number "not impnt." responses	per cent
1	skilled operation of key-driven calculator (4)	16	84%
2	skilled operation of rotary calculating machine (3)	15	79%

Rank Order Listing of Extreme Items in the "Adding Machines & Calculators" Section, According to Frequency of "Not Known" Responses

rank	item	number "not known" responses	per cent
1	skilled operation of rotary calculating machines (3)	16	84%
2	skilled operation of key-driven calculator (4)	16	84%

Occupational Proficiency Rating Scales -- Part I

 Rank Order Listing of Extreme Items in the "Adding Machines & Calculators" Section, According to Frequency of "Above Average Performance" Responses

rank	item	number "outstdg." or "very good" responses	per cent
1	skilled operation of full-keyboard adding listing machine (1)	2	11%
2	ability to change tapes, change ribbons, make minor repairs (6)	2	11%
3	skilled operation of ten-key adding listing machine (2)	2	11%

(NOTE: The other items on the scale also each received two--11%--"very good" responses, but had fewer "average or satisfactory" responses.)

Rank Order Listing of Extreme Items in the "Adding Machines & Calculators" Section, According to Frequency of "Below Average Performance" Responses

rank	item	number "barely satis- factory" & "not satis- factory" responses	per cent
1	ability to change tapes, change ribbons, make minor repairs (6) *(barely satisfactory)	1*	5%

Occupational Proficiency Rating Scales -- Part I

Rank Order Listing of Extreme Items in the "Duplicating Machines" Section, According to Frequency of "Very Important" Responses

rank	item	number "very impnt." responses	per cent
1	turns out clean, attractive, unsmudged work (11)	8	42%
2	assembles duplicated work neatly and in proper order; staples neatly (12)	8	42%
3	does not waste stencils, masters, or paper (13)	7	37%
4	cutting of ink-type duplicator stencils (1)	6	32%
5	operation of ink-type duplicating machine (3)	6	32%

Rank Order Listing of Extreme Items in the "Duplicating Machines" Section, According to Frequency of "Not Important" Responses

rank	item	number "not impnt." responses	per cent
1	operation of photostatic copiers (5)	15	79%
2	use of drawing board, stylus, and plates in stencil preparation (6)	12	63%
3	operation of spirit-type duplicating machines (4)	11	58%
4	typing of spirit-type duplicator master sheets (2)	8	42%
5	operation of ink-type duplicating machine (3)	8	42%

Rank Order Listing of Extreme Items in the "Duplicating Machines" Section, According to Frequency of "Not Known" Responses

rank	item	number "not known" responses	per cent
1	operation of photostatic copiers (5)	19	100%
2	use of drawing board, stylus, and plates in stencil preparation (6)	18	95%
3	operation of spirit-type duplicating machine (4)	15	79%
4	operation of ink-type duplicating machine (3)	12	63%
5	keeps self and clothes clean in operation (10)	12	63%

Occupational Proficiency Rating Scales -- Part I

 Rank Order Listing of Extreme Items in the "Duplicating Machines" Section, According to Frequency of "Above Average Performance" Responses

rank	item	number "outstdg." or "very good" responses	per cent
1	does not waste stencils, etc. (13)	6	32%
2	assembles duplicated work neatly, etc. (12)	4	21%
3	operation of ink-type duplicating machine (3)	4	21%
4	turns out clean, attractive work, etc. (11)	3	16%

Rank Order Listing of Extreme Items in the "Duplicating Machines" Section, According to Frequency of "Below Average Performance" Responses

There were no responses in below average categories.

APPENDIX E

Cover Letter Accompanying Preliminary Questionnaire
Sent to Employers of Haskell Commercial Graduates

Preliminary Questionnaire, Part II



UNITED STATES
DEPARTMENT OF THE INTERIOR

BUREAU OF INDIAN AFFAIRS

Commercial Department
Haskell Institute
Lawrence, Kansas

June 3, 1960

Personnel Manager
Hughes Aircraft Corporation
El Segundo, California

Subject: Mrs. Judith Dixon Suina

Dear Sir:

In order that we may be of greater service to employers, graduates, and future classes of students, the staff of the Commercial Department at Haskell is interested in learning of the status and progress of recent commercial graduates.

Our records indicate that the person named above is an employee in your organization. By completing the form which is enclosed, please verify whether or not Mrs. Suina is so employed.

If you are not the immediate supervisor of the subject employee, please make certain that these materials are placed in the hands of the one best qualified to complete the enclosed form. The data sheet will require very little time for completion, yet will be of considerable value to us. A return-addressed envelope is enclosed for your convenience.

Your prompt cooperation is deeply appreciated.

Sincerely yours,

J. Bruce Laughlin,
Accounting Instructor
(Mrs.) Mary Louise Neibarger,
Department Head, Commercial

Enclosures 2

Approved:

Solon G. Ayers
Superintendent

PRELIMINARY DATA SHEET--Survey of Employers of Haskell Institute Commercial Graduate

(name of rated employee) _____ date first employed: _____
current date: _____

name of employing firm or organization: _____
complete mailing address: _____

nature of employing firm's business: _____

name and title of employee's immediate supervisor: _____
(please fill in even if employee is no longer employed) _____

business address of this supervisor if different _____
than the firm address given above: _____

Including subject employee, how many employees are under the direct supervision of the employee's immediate supervisor? _____. If a federal employee, the grade classification of this supervisor is GS-_____. Including subject employee, how many employees in this organization (immediate location) have jobs which are the same as, or similar to, the one held by the rated employee? _____

subject employee's starting job title was: _____
subject employee's starting rate of pay was: \$ _____ per _____

the employee's starting job would best be described as that of: typist
 stenographer
(please darken the proper circle; if the job is, or was, secretary
a hybrid one, please darken the first choice and write receptionist
in appropriate numbers after the second and third choice, accounting cler
etc.; use the option blank provided if needed)

Status Changes: (after employee's first employment assignment)

I. date: _____
new job title, if different: _____
new job description, if different: _____
new pay rate, if different: \$ _____ per _____
reason for status change: _____

II. date: _____
new job title, if different: _____
new job description, if different: _____
new pay rate, if different: \$ _____ per _____
reason for status change: _____

III. date: _____
new job title, if different: _____
new job description, if different: _____
new pay rate, if different: \$ _____ per _____
reason for status change: _____

If, for any reason, the subject employee is no longer employed:
date of separation: _____ nature of separation: (voluntary) (forced)
claimed reason for separation: _____
real reason for separation, if different: _____
If separation was voluntary, did employee give proper notice? (yes) (no)
name and address of new employer, if known: _____
employee's forwarding address, if known: _____

Please complete and return this form promptly to J. Bruce Laughlin, Commercial Department, Haskell Institute, Lawrence, Kansas, using the envelope provided.
Your fine cooperation and willing response is sincerely appreciated.

APPENDIX F

Cover Letter Mailed With Rating Scales, Part II

Follow-Up Letter Mailed to Employers Who Did Not Respond



UNITED STATES
DEPARTMENT OF THE INTERIOR

BUREAU OF INDIAN AFFAIRS

Commercial Department
Haskell Institute
Lawrence, Kansas

June 28, 1960

Miss Anne C. Slayton,
Appropriation Accounts Supervisor
Bureau of Indian Affairs, District Office
3508 N. 7th Street
Phoenix, Arizona

Subjects: Survey to Determine Competencies of Commercial Graduates
--with implications for curriculum improvement

Evaluation of Mr. Clyde Cornelius

Dear Miss Slayton:

Thank you for your prompt completion and return of the preliminary data sheet concerning Mr. Cornelius. We are finding that, contrary to popular belief, supervisors are genuinely interested in their subordinates and quite willing to provide information so vital to revision and improvement of our training program.

With the approval and encouragement of administrative officials, and with the counsel of Dr. Cloy Hobson of the University of Kansas and Dr. J. Harvey Littrell of Kansas State University, a survey is being conducted to determine the weaknesses and strengths of graduates of the Commercial Department at Haskell Institute.

The purpose of this endeavor is to obtain answers to such questions as the following: In general, how well satisfied are supervisors and employers with Haskell Commercial graduates as employees? In what skill areas are our graduates weak? Can these weaknesses be attributed to poor or inadequate training? Can deficiencies be met through alteration of our training program? In which subject areas are we spending too little, or too much, time in training? What are the non-business deficiencies of our graduates, and what might we have done to prevent them? Are our graduates sufficiently well trained that they may anticipate regular promotions; if not, what are the reasons? Are we sufficiently selective in accepting applications for enrollment?

No one is better qualified than are you, Miss Slayton, to help us learn the answers to these questions. This is especially so because of your position, and the intellectual capabilities which that implies. By completing the forms which are enclosed, you can provide AUTHORITATIVE information. The rating scales will seem quite long (as, alas, does this letter!) But closer investigation will reveal that the topics considered are pertinent, and that the forms can be easily filled in with the simple insertion of X or check marks; no lengthy essay-type answers are called for.

Although your thoughtful attention is requested, it is felt that as a result of your cooperation you will ultimately be well rewarded with better trained job applicants from this institution. Too, the forms enclosed afford a framework of evaluation which will be quite useful to you in reviewing your own clerical operation. This says nothing of the personal satisfaction you will derive in helping to improve our educational system--certainly a timely and topical objective.

Since the Commercial Department cannot give supervisors and employers exactly "what you want" in employees without knowing whether or not our graduates "measure up" to supervisor-employer standards, it is important that you carefully consider each item in the questionnaire. Any unfavorable or negative answers are just as important as are favorable ones--probably more so. Over-use of "average" answers should be avoided. If you feel that the forms are too long to complete at one sitting in your busy schedule, please work intermittently in the evaluation, as time and motivation permit.

Even though your ratings will be based on a certain individual, the survey is not a "personal" thing; that is, criticism of some aspects of the performance of Mr. Cornelius will in no way damage him, or you, or anyone else. Information will be held in the strictest confidence. LOCATING PATTERNS OF EMPLOYEE DEFICIENCY IS THE OVERALL OBJECTIVE--in order that necessary improvements in teaching program can be made.

It is realized that this request is an imposition--"above and beyond the call" of your regular duties. Even so, the request is not apologetically made--for each of us has a very real moral responsibility to labor long and hard to improve the training of youth. We are confident that you are NOT one of that body of persons extremely critical of modern Education, yet unwilling to assist in its betterment. Be critical and complaining, yes, but please share your criticism.

A return-addressed envelope is enclosed for your convenience, and to expedite the return of these materials. Since mere words cannot properly express our gratitude for your cooperation in this rather large undertaking, we hope that the tangible and intangible rewards mentioned above will suffice.

Sincerely yours,

J. Bruce Laughlin

J. Bruce Laughlin,
Accounting Instructor
(Mrs.) Mary Louise Neibarger,
Department Head, Commercial

Enclosures

Approved:

Solon G. Ayers
mdn

Solon G. Ayers
Superintendent



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF INDIAN AFFAIRS

Commercial Department
Haskell Institute
Lawrence, Kansas

September 8, 1960

Mr. Kermeth S. Engel,
Real Property Assistant
Bureau of Indian Affairs
Standing Rock Agency
Fort Yates, North Dakota

Subjects: Survey to Determine Competencies of Commercial Graduates
--with implications for curriculum improvement

Evaluation of Miss Francine Crow Ghost -- Follow-Up

Dear Mr. Engel:

Our records indicate that you graciously responded to a preliminary data sheet questionnaire concerning Miss Crow Ghost mailed to you on June 4. However, we have not yet received your evaluation per the intensive battery of rating scales sent you on July 2.

Realizing that you have had a rigorous schedule of work this summer, we are yet hopeful that you will soon find time to complete and return the rating scales. (Persons having your responsibility usually manage to accomplish, in some way, the seemingly impossible.) The overall response to our survey has been excellent, but we urgently need YOUR important evaluation--the study will simply not be complete without it.

If you have misplaced your set of rating scales, please so indicate on this letter and return it to us--a new set of forms will then be promptly provided.

Thank you for your outstanding cooperation in helping to improve the educational opportunities of youth.

Sincerely yours,

J. Bruce Laughlin

J. Bruce Laughlin,
Accounting Instructor
(Mrs.) Mary Louise Neibarger,
Department Head, Commercial

Approved:

Solon G. Ayers
mca

Solon G. Ayers
Superintendent

APPENDIX G

Rating Scales Mailed to Employers

Including Results Obtained From Part II of the Study

ESTIMATE OF INSTRUCTIONAL EFFICIENCY

NAME of employee whose training is being evaluated: _____ date of evaluation: _____

name of rater: _____

job or position title: _____

position of rater: _____

INSTRUCTIONS: Through close association and observation you have doubtless come to know the employee quite well. Although it is not easy to separate your estimate of the employee's God-given ability from your estimate of the quality of training the employee received, you probably have drawn some quite definite conclusions. If the employee seems highly intelligent, but does not perform well in certain tasks, you assume the training for these tasks was not good; conversely, if the employee seems rather dull in general, but performs many tasks well, you assume the training in these areas was good. Keeping in mind: (1) the apparent learning ability of the employee; (2) the amount of training time (see below); and, (3) the usual level of performance by the employee in each subject area, please ESTIMATE THE PROBABLE QUALITY OF INSTRUCTION which the employee received. Mark one X only for each of the ten listed subject areas; use column 6 only if the subject area being considered is not a part of the employee's job.

Course, Subject or Instructional Area	No. of 55-min. periods	Time Spent in Training		Estimate of Instructional Efficiency--Quality of Training						comments	
		Total hours*	Training time, converted (to work weeks and days)**	1 out-stdg.	2 very good	3 av. or satisf.	4 barely satisf.	5 not satisf.	6 no est.		
TYPING	360	330	8 weeks and 1 day		8	52	34	5		1	
SHORTHAND & TRANSCRIPTION	540	495	12 weeks and 2 days	1	3	26	22	9	2	37	
BUSINESS ENGLISH	360	330	8 weeks and 1 day	1	3	38	34	14	2	8	
BOOKKEEPING & ACCOUNTING	540	495	12 weeks and 2 days	1	2	13	19	5	1	59	
BUSINESS MATHEMATICS	90	83	2 weeks and 1/2 day	1	1	12	25	6	1	54	
BUSINESS LAW	90	83	2 weeks and 1/2 day			1	15	1	2	81	
ADDING MACHINES & CALCULATORS	25	23	3 days	1	2	25	36	3		33	
DUPLICATING MACHINES	15	14	1-3/4 days	2	4	20	33	2		39	
VOICE WRITING MACHINES	15	14	1-3/4 days	1	3	9	14	2		71	
OFFICE PRACTICE (orientation; on-the-job training)	45	41	1 week	6	7	29	45	5	2	6	

(*) approximate; allowance has not been made for time lost due to occasional assemblies, etc.

(**) conversion to 40-hour work weeks and/or 8-hour work days is for the purpose of making training time amounts more understandable.

NA means "not answered"

Totals:

14	33	225	277	52	10	389
1%	3%	23%	28%	5%	1%	39%

name of rated employee: _____

INSTRUCTIONAL AREA TIME ALLOTMENT EVALUATION

name of rater: _____

job or position title: _____

date of evaluation: _____

For this employee POSITION: _____

Course, Subject or
Instructional AreaTime Spent in TrainingOn the job he (she) now holds
the amount of time spent in training was probably:mark an 'X' in columns
1, 2, 3, 4, or 5 for
each subject area
other; please
add remarks
or comments
which are
appropriate

	no. of 55-min. class periods		total hours*		training time, converted (to work weeks and days)**	NA	1 wasted not req'd. on this job	2 more than is needed on this job	3 about right for this job	4 less than is needed on this job	5 far too little for this job	
TYPING	360	330	8 weeks 1 day	26	1	4	60	8	1			
SHORTHAND & TRANSCRIPTION	540	495	12 weeks and 2 days	1	27	15	40	13	4			
BUSINESS ENGLISH	360	330	8 weeks and 1 day	2	5	7	59	21	6			
BOOKKEEPING & ACCOUNTING	540	495	12 weeks and 2 days	5	36	20	34	4	1			
BUSINESS MATHEMATICS	90	83	2 weeks	3	33	18	36	9	1			
BUSINESS LAW	90	83	2 weeks	3	58	13	18	7	1			
ADDING MACHINES & CALCULATORS	25	23	3 days	2	18	10	61	9				
DUPLICATING MACHINES	15	14	1-3/4 days	5	25	8	54	8				
VOICE WRITING MACHINES	15	14	1-3/4 days	3	56	8	23	5	5			
OFFICE PRACTICE (orientation; on-the-job training)	45	41	1 week	9		4	69	14	4			

(*) approximate; smaller amounts are rounded to the nearest hour; allowance has not been made for time lost due to occasional assemblies, etc.

(**) to facilitate comprehension of time amounts involved, total training time in each subject area has been converted to 40-hour work weeks and/or 8-hour work days; i.e., it is pretended that only one subject was taken at a time; this is for understanding only, and was not the fact.

NOTE: In completing this form, please keep in mind: (1) the native ability of the employee as observed by you; (2) the amount of time spent in the study of each instructional area, as indicated above; (3) the commonly-understood content of each named subject area; (4) the duties of the position which the employee holds. Think in terms of THIS EMPLOYEE and THIS JOB and THIS TRAINING, as best you can assume it.

NA means "not answered"

Totals

59	259	117	454	98	23
6%	26%	12%	45%	10%	2%

Name of employee being rated, last name first _____ Date of evaluation: _____
Name of employing organization: _____
Address of employing organization: _____
Address where employee works, if different: _____
Name of employee's immediate supervisor: _____
Grade, title, position of this supervisor: _____
Name, grade, title, position of rater _____
if other than immediate supervisor: _____
Title of rated employee's position: _____
Brief job descriptions: (please attach previously prepared job or position description if convenient) _____

Date rated employee was employed: _____ No. mo's. present jobs: _____
No. mo's. rater has supervised employees: _____ No. persons who normally work in the rated employee's primary working area: _____
No. employees under rater's supervision: _____
Av. no. of employees with whom rated employee has daily business contact involving exchange of information or materials: _____ Estimated no. of non-employees with whom rated employee has daily business contact: (from _____ to _____ persons)

No. of employees in this organization under rater's supervision who have jobs or duties similar to those of rated employee: _____

INSTRUCTIONS FOR COMPLETING THE OCCUPATIONAL PROFICIENCY RATING SCALE:

1. Observe the layout of page 1 of the Occupational Proficiency Rating Scale. Visualize and ponder the two general types of information which are sought.
2. Be aware that an X placed in a column will indicate an estimate or evaluation. General headings (items which are not numbered) need not be rated.
3. Complete the left half of the entire rating scale before starting the right half. That is, fill in the three "Importance" columns for all items before evaluating ANY items as to "performance." (Read all instructions first, tho.)
4. Cover the right half of the rating scale while you complete the left half. That is, cover the six "performance" columns while you rate "importance."
5. Evaluate the importance of each item on the basis of whether the item is: performance of the job which the rated employee holds. For each item, choose but one of the three columns named. (Time spent at a task will probably have a direct influence on relative importance, but not necessarily so. That is, some abilities which are not often used MAY nevertheless be of critical import when called for on a particular job.)
6. After completing the left half of the scale, cover that half of each page as you complete the right half of the entire rating scale. That is, cover the three "importance" columns while you rate "performance or condition."
7. Rate the employee for each item on the basis of whether his (her) performance or condition for that item is: (1) OUTSTANDING; (2) VERY GOOD; (3) AVERAGE OR SATISFACTORY; (4) BARELY SATISFACTORY; (5) NOT SATISFACTORY; or (6) NOT KNOWN. For each item, choose but one of the six columns named.
8. In rating the employee's performance or condition, use column 6, the NOT KNOWN column, ONLY if you have absolutely no basis for evaluation. This column should not be used as a dumping ground for uncomfortable or unfavorable answers.
9. Reasons for completing the left half ("importance") columns while the right half ("performance") columns are covered, and vice versa:
 - a. This permits the rater to answer more rapidly and easily, without disturbing the trend of thought--first as to "this job," then as to "this employee."
 - b. It also permits more accurate choices, as the influence of one type of rating upon the other is reduced.
10. After completion of the rating scale, there should be TWO X's for each item--one to the left of the item description (in any one of the three "importance" columns), and another to the right of the item description (in any one of the six "performance or condition" columns).
11. Remarks in the "comments" column are welcomed, but not expected for a large number of items. Comments are especially sought to identify specific defects or weaknesses, or outstanding attributes.

OCCUPATIONAL PROFICIENCY RATING SCALE

page 1

IMPORTANCE OF ITEM EVALUATED TO JOB FIELD			ITEM EVALUATED (employee trait, characteristic, achievement, or ability)	NA	EVALUATION: RATING OF EMPLOYEE'S PERFORMANCE OR CONDITION						comments
very impt.	fairly impt.	not impt.			1 out- stdg.	2 very good	3 av. or satisf.	4 barely satisf.	5 not satisf.	6 not known	
GENERAL CHARACTERISTICS											
72	28		1. Adaptability	1	9	44	36	10			
77	22		2. Alertness; intelligence; analytical ability	1	10	43	35	11			
85	14	1	3. Attendance regularity		17	38	33	11	1		
65	35		4. Cheerfulness; pleasantness		20	42	32	6			
79	19	1	5. Common sense; judgment		8	32	49	10	1		
80	20		6. Cooperativeness; helpfulness		21	45	28	6			
70	29	1	7. Courtesy; manners; etiquette		20	44	28	8			
29	54	17	8. Creativeness; imagination	2	10	10	51	16	2	9	
92	7		9. Dependability; reliability	1	18	40	30	7	4		
45	50	5	10. Desire for self-improvement and promotion		11	25	43	16	3	2	
67	31	1	11. Effort; industry		12	40	35	10	2	1	
48	48	3	12. Enthusiasm; spirit; zeal; zest		7	28	41	20	3	1	
62	29	7	13. Friendliness; ease in meeting people		14	37	31	15	3		
39	54	6	14. Health; physical vigor		12	42	38	5	3		
74	25	1	15. Honesty; integrity; character		31	41	25	2	1		
51	46	3	16. Initiative; eagerness to accept responsibility		8	29	42	13	7	1	

NA means "not answered"

OCCUPATIONAL PROFICIENCY RATING SCALE

NA	IMPORTANCE OF ITEM EVALUATED TO JOB HELD			ITEM EVALUATED (employee trait, characteristic, achievement, or ability)	NA	EVALUATION: RATING OF EMPLOYEE'S PERFORMANCE OR CONDITION						comments	
	very imp.	fairly imp.	not imp.			1 out-stdg.	2 very good	3 av. or satisf.	4 barely satisf.	5 not satisf.	6 not known		
				GENERAL CHARACTERISTICS (continued)									
	5	47	48	17.	Leadership abilities; dominance	2	4	11	44	16	5	18	
1	59	36	4	18.	Loyalty to organization & to supvn.	1	15	43	36	3	2		
1	47	50	2	19.	Mental health; adjustment to environ't.	1	10	41	43	3	2		
1	63	33	3	20.	Morals; ethics		17	48	28	3		4	
	55	43	2	21.	Persistence; "sticktoitiveness"		14	41	36	8	1		
	18	57	25	22.	Physical quickness; mobility; agility	1	11	31	49	4		4	
1	52	43	4	23.	Poise; stability when under stress	1	8	31	48	8	1	3	
	68	32		24.	Respect for authority, rights, property		18	46	32	4			
	51	46	3	25.	Self-confidence; self-reliance	1	6	26	47	18	1		
	26	52	22	26.	Self-expression; extroversion; assert.		4	17	52	23	4		
	25	59	16	27.	Sense of humor		12	38	41	7		2	
	46	50	4	28.	Tactfulness; social awareness		11	28	47	12	1	1	
					(please make additions as you see fit)								
				29.									
				30.									
				31.	NA means "not answered"								

12 1550 1059 179
0% 55% 38% 6%

Totals, including previous page
12 358 981 1081 275 47 46
0% 13% 35% 39% 10% 2% 2%

OCCUPATIONAL PROFICIENCY RATING SCALE

Jbl/12-59

page 3

NA	IMPORTANCE OF ITEM EVALUATED TO JOB HELD			ITEM EVALUATED (employee trait, characteristic, achievement, or ability)	NA	EVALUATION: RATING OF EMPLOYEE'S PERFORMANCE OR CONDITION						comments
	very imp.	fairly imp.	not imp.			1 out-stdg.	2 very good	3 av. or satisf.	4 barely satisf.	5 not satisf.	6 not known	
				PERSONAL								
1	50	49		1. Overall personal appearance		23	55	19	2	1		
1	68	31		2. Cleanliness		30	55	14	1			
1	58	41		3. Grooming of hair, hands, and face		23	54	19	3	1		
1	31	62	6	4. Taste in clothing and accessories		21	47	29	2	1		
2	18	48	32	5. Trimness of figure; weight?	5	20	43	27	3	1	1	
2	16	53	29	6. Posture; gracefulness of movement	4	18	37	34	5	1	1	
8	12	54	26	7. Has good housing	5	2	31	32	3	2	25	
10	16	55	19	8. Eats wholesome foods; proper diet	4	3	20	19		1	53	
10	35	52	3	9. Gets adequate sleep	4	5	29	15	2	1	44	
10	27	48	15	10. Wisely chooses friends	6	4	28	21	2	2	37	
11	14	35	40	11. Has a church affiliation	5	5	23	17	1		49	
10	16	38	36	12. Makes wise use of leisure time	4	1	17	24	1	2	51	
11	12	42	35	13. Is thrifty; buys wisely	5	2	20	17	2	2	52	
				14.								
				15.								
				16. NA means "not answered"								

78 373 608 241
6% 28% 47% 19%

Totals 42 157 459 287 27 15 313
3% 12% 35% 22% 2% 1% 24%

OCCUPATIONAL PROFICIENCY RATINGS SCALE

Jb1/12-59

page 4

IMPORTANCE OF ITEM EVALUATED TO JOB HELD			ITEM EVALUATED (employee trait, characteristic, achievement, or ability)	NA	EVALUATION: RATING OF EMPLOYEE'S PERFORMANCE OR CONDITION						comments
very impt.	fairly impt.	not impt.			1 out- stdg.	2 very good	3 av. or satisf.	4 barely satisf.	5 not satisf.	6 not known	
			WORK HABITS								
86	12	2	1.	Punctuality; arrives at work on time; prompt.		16	49	24	7	4	
72	27	1	2.	Likes work, especially detail work		5	45	44	5	1	
91	9		3.	Follows directions, both oral and written.		9	41	42	8		
62	34	4	4.	Organizes and plans work; budgets time		6	30	45	15	2	2
59	38	2	5.	Does not need close supervision	1	12	31	44	9	3	
45	50	5	6.	Generally works rapidly		9	36	41	11	3	
83	17		7.	Works accurately; takes pride in perfection		13	37	32	15	3	
73	25	2	8.	Asks relevant questions when necessary		9	45	34	9	3	
63	34	2	9.	Accepts criticism gracefully and complies	1	11	44	30	12	2	
71	27	1	10.	Has a good attitude toward supervision	1	13	51	25	9	1	
55	42	2	11.	Likes other employees		13	50	30	3	1	3
49	45	5	12.	Is liked by other employees		19	50	24	2	1	4
53	44	3	13.	Keeps area and materials clean, orderly		17	45	34	2	2	
44	52	4	14.	Conserves supplies and materials		8	43	47	1	1	
59	36	4	15.	Can "overproduce" in emergency situations		10	38	37	9	4	2
72	25	3	16.	Establishes & meets work completion deadlines		13	42	35	8	2	

NA means "not answered"

OCCUPATIONAL PROFICIENCY RATING SCALE

jbl/12-59

NA	IMPORTANCE OF ITEM EVALUATED TO JOB HELD			ITEM EVALUATED (employee trait, characteristic, achievement, or ability)	NA	EVALUATION: RATING OF EMPLOYEE'S PERFORMANCE OR CONDITION						comments	
	very imp.	fairly imp.	not imp.			1 out-stdg.	2 very good	3 av. or satisf.	4 barely satisf.	5 not satisf.	6 not known		
				WORK HABITS (continued)									
1	30	60	9	17.	Anticipates supervisory requests	4	5	30	43	8	4	6	
	62	38		18.	Works to day's end; not a clock-watcher		17	44	34	3	2		
2	47	39	12	19.	Does not seek special treatment or favors		19	50	29	1	1		
2	30	48	20	20.	Willingly volunteers late work when needed	3	9	39	22	9	2	16	
2	59	37	2	21.	AVOIDS TIME LOSS CAUSED BY: Idle chit-chat	6	12	41	30	8	3		
1	57	37	5	22.	Coffee break abuses	4	5	48	36	4	2	1	
2	55	38	5	23.	Excess time in lounge or rest room		10	52	35		1	2	
1	56	39	4	24.	Personal business and phone calls		14	51	27	3	4	1	
1	63	33	3	25.	Extended lunch periods		16	51	28	4	1		
2	53	41	4	26.	Friends dropping in		16	48	30	1	4	1	
5	34	36	25	27.	DOES NOT ANNOY OTHERS WITH: Smoking	3	41	40	14	1		1	
4	33	39	24	28.	Gum chewing		38	44	12	2	2	2	
				29.	Other:								
				30.									
				31.									
				32.	NA means "not answered"								

29 1616 1002 153 23 385 1215 908 169 59 41
 1% 58% 36% 5% Totals, including previous page 1% 14% 43% 32% 6% 2% 1%

OCCUPATIONAL PROFICIENCY RATING SCALE

jbl/12-59

page 6

NA	IMPORTANCE OF ITEM EVALUATED TO JOB HELD			ITEM EVALUATED (employee trait, characteristic, achievement, or ability)	NA	EVALUATION: RATING OF EMPLOYEE'S PERFORMANCE OR CONDITION						comments
	very imp.	fairly imp.	not imp.			1 out-stdg.	2 very good	3 av. or satisf.	4 barely satisf.	5 not satisf.	6 not known	
				TYPING								
6	37	39	18	1.	Overall typing productivity--manual machines	3	5	42	28	2		20
6	43	22	29	2.	Overall typing productivity--electric	4	8	29	32	3		24
1	37	45	17	3.	Typing speed--straight copy		8	41	33	4		14
1	73	14	12	4.	Typing accuracy--straight copy		10	36	33	9	1	11
1	42	37	20	5.	Typing speed--numbers, tabular, etc.	2	6	33	40	3		16
1	66	19	14	6.	Typing accuracy--numbers, tabular, etc.	1	7	37	35	4	1	15
4	40	40	16	7.	Proofreading speed; scans rapidly	3	7	31	41	6	2	10
3	70	19	8	8.	Proofreading accuracy; detects ALL errors	3	4	27	43	13	3	7
3	52	39	6	9.	Erasing ability; quickly, neatly erases	2	5	35	42	6	3	7
4	49	36	11	10.	Arrangement of work: artistic, original, functional, pleasing to the eye	3	12	30	47	2		6
2	42	50	6	11.	Machine maintenance: cleanliness, ribbon replacement, minor repairs	2	10	36	47	2		3
6	9	29	56	12.	Chain feeding ability: envelopes, labels, cards, etc.	2	3	18	22			55
				13.								
				14.								
				15.	NA means "not answered"							

NOTE: Please use blank item spaces to list other items which are significant;

or, use available space for comments or suggestions.

38 560 389 213
3% 47% 32% 18%

Totals 25 85 395 443 54 10 188
2% 7% 33% 37% 5% 1% 16%

OCCUPATIONAL PROFICIENCY RATING SCALE

jbl/12-59

page 7

NA	IMPORTANCE OF ITEM EVALUATED TO JOB HELD			ITEM EVALUATED (employee trait, characteristic, achievement, or ability)	NA	EVALUATION: RATING OF EMPLOYEE'S PERFORMANCE OR CONDITION						comments	
	very imp.	fairly imp.	not imp.			1 out-stdg.	2 very good	3 av. or satisf.	4 barely satisf.	5 not satisf.	6 not known		
				SHORTHAND AND TRANSCRIPTION									
1	29	29	41	1.	Overall shorthand-transcription production	1	13	13	24	7	4	38	
1	19	37	43	2.	Shorthand writing speed	1	4	21	26	6	4	38	
3	14	31	52	3.	Non-interruption of dictator	2	4	23	23	3	1	44	
5	1	8	86	4.	Takes notes in non-office setting; (on tours, inspection trips, etc.)	6	3	2	9	1	1	78	
2	17	38	43	5.	Transcription speed	2	4	17	30	7	3	37	
1	39	19	41	6.	Transcription accuracy	1	5	17	28	9	3	37	
3	3	14	80	7.	Ability to write shorthand notes so that others may transcribe therefrom	3		7	14	2	2	72	
4	1	18	77	8.	Ability to transcribe notes of others	4	1	6	15	1	2	71	
2	19	37	42	9.	Familiarity with common terms and jargon	2	3	14	39	3	1	38	
2	19	29	50	10.	Ability to transcribe from "cold" notes	2	1	14	27	5	3	48	
				11.	NA means "not answered"								
24	161	260	555	Totals		24	38	134	235	44	24	501	
2%	16%	26%	56%	VOICE WRITING		2%	4%	13%	24%	4%	2%	50%	
14	13	9	64	1.	Operation of _____ (insert trade name of machine)	16	1	9	9	4		61	
13	16	6	65	2.	Typing production from voice sources	14	3	7	10	3		63	
				3.									
27	29	15	129	Totals		30	4	16	19	7		124	
14%	14%	8%	64%			15%	2%	8%	10%	4%		62%	

OCCUPATIONAL PROFICIENCY RATING SCALE

jbl/12-59

page 8

NA	IMPORTANCE OF ITEM EVALUATED TO JOB HELD			ITEM EVALUATED (employee trait, characteristic, achievement, or ability)	NA	EVALUATION: RATING OF EMPLOYEE'S PERFORMANCE OR CONDITION						comments
	very imp.	fairly imp.	not imp.			1 outstdg.	2 very good	3 av. or satisf.	4 barely satisf.	5 not satisf.	6 not known	
				ENGLISH; oral and written communication								
	33	59	8	1.		6	35	49	8	1	1	
	36	58	6	2.		5	38	50	4	1	2	
	27	66	7	3.		5	32	49	9	1	3	
	41	49	10	4.		3	30	48	16	1	2	
	33	53	14	5.		4	31	54	8	1	2	
	42	49	29	6.		12	40	41	5		2	
1	32	52	15	7.		7	27	47	14	2	2	
2	32	36	30	8.		9	27	27	6	4	26	
	48	41	11	9.		7	32	43	6	2	9	
1	58	29	12	10.		7	30	39	8	2	12	
1	50	33	16	11.		6	28	45	5	2	13	
1	35	40	24	12.		5	22	30	14	2	26	
1	69	22	8	13.		12	34	38	5	2	8	
1	69	23	7	14.		10	28	46	6	2	7	
1	30	41	28	15.		11	41	41			6	
				16.								

26 715 714 345
19% 40% 40% 19%

Totals, including addenda from page 13

25 116 528 728 124 25 254
1% 6% 29% 40% 7% 1% 14%

OCCUPATIONAL PROFICIENCY RATING SCALE

jbl/12-59

page 9

NA	IMPORTANCE OF ITEM EVALUATED TO JOB HELD			ITEM EVALUATED (employee trait, characteristic, achievement, or ability)	NA	EVALUATION: RATING OF EMPLOYEE'S PERFORMANCE OR CONDITION						comments
	very imp.	fairly imp.	not imp.			1 out-stdg.	2 very good	3 av. or satisf.	4 barely satisf.	5 not satisf.	6 not known	
				BOOKKEEPING AND ACCOUNTING								
2	19	16	63	1. General bookkeeping & accounting proficiency	2	3	14	16	4		61	
2	17	14	87	2. Speed in doing bookkeeping & accounting work	2	1	11	21	3	1	61	
2	29	8	61	3. Accuracy in doing bookkeeping & accounting	2	2	13	18	4	1	60	
1	30	26	43	4. Understanding of simple records	1	4	17	30	3		45	
1	18	17	64	5. Understanding of complex records	3	2	11	19	8	1	56	
2	13	16	69	6. Understanding of the bookkeeping cycle	3	2	7	18	5		65	
3	9	14	74	7. Ability to analyze business transactions and to journalize same	2	1	7	6	7	2	75	
2	23	11	64	8. Ability to post rapidly and accurately	2	2	12	23	1	2	58	
2	8	9	81	9. Computation of accounts receivable & payable	3	1	7	9	1	1	78	
1	17	13	69	10. Ability to prepare work sheets	2	2	10	19	2		65	
2	10	8	80	11. Preparation of financial statements	3	2	7	8	2		78	
1	9	9	81	12. Preparation of statements of account	3	2	7	9	1		78	
3	10	7	80	13. Proficiency in payroll accounting	3	1	7	9	1	1	78	
5	8	3	84	14. Proficiency in tax accounting	7		4	5			84	
2	16	9	73	15. Ability to detect accounting errors	5	2	8	14	1	2	68	
4	4	3	89	16. Preparation of bank checks & stubs	6	1	1	5			87	
4	3	3	90	17. Reconciliation of bank statements	5	1	2	4			88	
				18.								
				19. NA means "not answered"								

39 243 186 1232
2% 14% 11% 72%

Totals 54 29 145 233 43 11 1185
3% 2% 9% 14% 3% 1% 70%

OCCUPATIONAL PROFICIENCY RATING SCALE

jb1/12-59

page 10

NA	IMPORTANCE OF ITEM EVALUATED TO JOB HELD			ITEM EVALUATED (employee trait, characteristic, achievement, or ability)	NA	EVALUATION: RATING OF EMPLOYEE'S PERFORMANCE OR CONDITION						comments	
	very imp.	fairly imp.	not imp.			1 out-stdg.	2 very good	3 av. or satisf.	4 barely satisf.	5 not satisf.	6 not known		
				BUSINESS MATHEMATICS									
2	19	21	58	1.	Overall business arithmetic production	1	2	17	21	1		58	
2	14	31	53	2.	Knowledge of the four basic math processes		1	14	27	2		56	
3	11	26	60	3.	Arithmetic speed	1	1	12	29	2		55	
2	29	25	44	4.	Arithmetic accuracy		2	20	29	3		48	
2	12	40	46	5.	Numbers penmanship; writes neatly, legibly	2	5	30	22	1		36	
3	12	13	72	6.	Ability to convert problem situations to numerical terms and to solve them	3	1	6	18	2		70	
3	11	23	63	7.	Ability to do abstract reasoning	3	1	10	20	4	1	61	
3	5	6	86	8.	Computation of discount periods & discounts	4	1	3	10	1	1	80	
3	13	21	63	9.	Computation of percentage	4	1	10	19	1	2	63	
3	11	27	59	10.	Fractions, knowledge and use of	3	1	11	20	3	2	60	
4	4	15	77	11.	Ratios, knowledge and use of	3	1	3	8	4	2	79	
3	15	28	54	12.	Decimal point usage		1	13	26	1	2	57	
4		4	92	13.	Depreciation computation	4		1	7		2	86	
4		14	82	14.	Preparation of graphs, and understanding same	2		1	12	2	1	82	
3	4	5	88	15.	Computation of interest	4	1	2	10		1	82	
				16.									
				17.									
				18.	NA means "not answered"								

44 160 299 997
3% 11% 20% 66%

Totals

34 19 157 276 27 14 973
20% 19% 10% 18% 29% 19% 65%

OCCUPATIONAL PROFICIENCY RATING SCALE

jb1/12-59

page 11

NA	IMPORTANCE OF ITEM EVALUATED TO JOB HELD			ITEM EVALUATED (employee trait, characteristic, achievement, or ability)	NA	EVALUATION: RATING OF EMPLOYEE'S PERFORMANCE OR CONDITION						comments
	very imp.	fairly imp.	not imp.			1 out-stdg.	2 very good	3 av. or satisf.	4 barely satisf.	5 not satisf.	6 not known	
BUSINESS LAW												
6	8	10	76	1. Overall knowledge of business law	6		2	9	4			79
6	7	8	79	2. Knowledge of elementary contract law	6		2	10	3			79
6	2	4	88	3. Knowledge of buyer-seller legal relations	6		2	6	3			83
6	7	9	78	4. Knowledge of employer-employee legal relations	7	1	2	9	3			78
6	7	3	84	5. Knowledge of negotiable instruments law	6	1	2	6	3			82
6	5	3	86	6. Knowledge of elementary insurance law	6			7	2			85
6	7	9	78	7. Knowledge of motor vehicle laws	6	1	3	7	5			78
5	3	8	84	8. Knowledge of debtor-creditor relations	5	1	4	5	3			82
6	1	8	85	9. Knowledge of elementary property law	6		2	5	3	1		83
6	1	7	86	10. Knowledge of the law of business organization	6	1	2	4	4			83
				11.								
59	48	69	824	Totals	60	5	21	68	33	1		812
6%	5%	7%	82%	ADDING MACHINES AND CALCULATORS	60%	5%	21%	68%	33%	1%		812%
7	6	13	74	1. Skilled operation of full-keyboard adding listing machine:	9	3	6	10	2			70
3	23	28	46	2. Skilled operation of ten-key adding listing machine:	3	5	24	19	2			47
8	7	4	81	3. Skilled operation of rotary calculating machine:	10	1	8	5	2			74
5	6	12	77	4. Skilled operation of key-driven calculators:	7	1	7	11	5			69
				5. NA means "not answered"								
24	63	101	312	Totals, including addenda from page 13	31	16	74	75	12			292
5%	13%	20%	62%		6%	3%	15%	15%	2%			58%

OCCUPATIONAL PROFICIENCY RATING SCALE

jbl/12-59

page 12

NA	IMPORTANCE OF ITEM EVALUATED TO JOB HELD			ITEM EVALUATED (employee trait, characteristic, achievement, or ability)	NA	EVALUATION: RATING OF EMPLOYEE'S PERFORMANCE OR CONDITION						comments	
	very imp.	fairly imp.	not imp.			1 out-stdg.	2 very good	3 av. or satisf.	4 barely satisf.	5 not satisf.	6 not known		
2	33	29	36	1.	Cutting of ink-type duplicator stencils	1	5	29	26	1			38
8	27	20	45	2.	Typing of spirit-type duplicator master sheets	7	6	24	20				43
11	13	21	55	3.	Operation of _____ ink-type duplicating machines (insert name & model)	10	3	11	16	3			57
12	18	15	55	4.	Operation of _____ spirit-type duplicating machines (insert name & model)	7	4	17	12	2			58
11	15	25	49	5.	Operation of _____ photo-static copiers (insert name & model)	8	6	20	15	1			50
7	4	17	72	6.	Use of drawing board, stylus, and plates in stencil preparation	10	1	9	11	2			67
5	34	29	32	7.	Makes good corrections on stencils	3	3	29	28	1			36
11	24	17	48	8.	Makes good corrections on spirit masters	8	4	16	20	1			51
6	27	20	47	9.	Keeps machines clean and in good condition	4	6	17	25	1			47
7	23	32	38	10.	Keeps self and clothes clean in operation	6	5	35	19	1			34
5	32	32	31	11.	Turns out clean, attractive, unsmudged work	3	9	27	28	1			32
7	38	26	29	12.	Assembles duplicated work neatly and in proper order; staples work neatly	4	7	32	24	1			32
5	35	33	27	13.	Does not waste stencils, masters, or paper	3	8	25	30	3			31
				14.	NA means "not answered"								

NOTE: If more space is needed for comments, please use reverse sides of rating sheets--being careful to identify item numbers. Specify weaknesses. Intelligent criticism is sought. The curriculum cannot be improved without specific complaints. Be candid. Be blunt. Call a spade a spade.

97 323
8% 25% 316 564
24% 43%

Totals

74 67 291 274 18 576
6% 5% 22% 21% 1% 44%

APPENDIX H

Part II Results

Occupational Proficiency Rating Scales

All items ranked in each section according to:

Importance, based on frequencies
of "very important" responses

Unimportance, based on frequencies
of "not important" responses

Unimportance, based on frequencies
of "not known" responses

Good Performance, based on frequencies
of "above average" responses

Poor Performance, based on frequencies
of "below average" responses

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "General Characteristics" Section
According to Frequency of "Very Important" Responses

rank	item	number "very impnt." responses*
1	dependability; reliability (9)	92
2	attendance regularity (3)	85
3	cooperativeness; helpfulness (6)	80
4	common sense; judgment (5)	79
5	alertness; intelligence; analytical ability (2)	77
6	honesty; integrity; character (15)	74
7	adaptability (1)	72
8	courtesy; manners; etiquette (7)	70
9	respect for authority, rights, property (24)	68
10	effort; industry (11)	67
11	cheerfulness; pleasantness (4)	65
12	morals; ethics (20)	63
13	friendliness; ease in meeting people (62)	62
14	loyalty to organization and supervision (18)	59
15	persistence; "sticktoitiveness" (21)	55
16	poise; stability when under stress (23)	52
17	initiative; eagerness to accept responsibility (16)	51
18	self-confidence; self-reliance (25)	51
19	enthusiasm; spirit; zeal; zest (12)	48
20	mental health; adjustment to environment (19)	47
21	tactfulness; social awareness (28)	46
22	desire for self-improvement and promotion (10)	45
23	health; physical vigor (14)	39
24	creativity; imagination (8)	29
25	self-expression; extroversion; assertiveness (26)	26
26	sense of humor (27)	25
27	physical quickness; mobility; agility (22)	18
28	leadership abilities; dominance (17)	5

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "General Characteristics" Section
According to Frequency of "Not Important" Responses

rank	item	number "not impt." responses
1	leadership abilities; dominance (17)	48
2	physical quickness; mobility; agility (22)	25
3	self-expression; extroversion; assertiveness (26)	22
4	creativity; imagination (8)	17
5	sense of humor (27)	16
6	friendliness; ease in meeting people (13)	7
7	health; physical vigor (14)	6
8	desire for self-improvement and promotion (10)	5
9	loyalty to organization and to supervision (18)	4
10	poise; stability when under stress (23)	4
11	tactfulness; social awareness (28)	4
12	enthusiasm; spirit; zeal; zest (12)	3
13	initiative; eagerness to accept responsibility (16)	3
14	morals; ethics (20)	3
15	self-confidence; self-reliance (25)	3
16	mental health; adjustment to environment (19)	2
17	persistence; "sticktoitiveness" (19)	2
18	attendance regularity (3)	1
19	common sense; judgment (5)	1
20	courtesy; manners; etiquette (7)	1
21	effort; industry (11)	1
22	honesty; integrity; character (15)	1
23	adaptability (1)	0
24	alertness; intelligence; analytical ability (2)	0
25	cheerfulness; pleasantness (4)	0
26	cooperativeness; helpfulness (6)	0
27	dependability; reliability (9)	0
28	respect for authority, rights, property (24)	0

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "General Characteristics" Section
According to Frequency of "Not Known" Responses

rank	item	number "not known" responses
1	leadership abilities; dominance (17)	18
2	creativity; imagination (8)	9
3	morale; ethics (20)	4
4	physical quickness; mobility; agility (22)	4
5	poise; stability when under stress (23)	3
6	desire for self-improvement and promotion (10)	2
7	sense of humor (27)	2
8	effort; industry (11)	1
9	enthusiasm; spirit; zeal; zest (12)	1
10	initiative; eagerness to accept responsibility (16)	1
11	tactfulness; social awareness (1)	1
12	adaptability (1)	0
13	alertness; intelligence; analytical ability (2)	0
14	attendance regularity (3)	0
15	cheerfulness; pleasantness (4)	0
16	common sense; judgment (5)	0
17	cooperativeness; helpfulness (6)	0
18	courtesy; manners; etiquette (7)	0
19	dependability; reliability (9)	0
20	friendliness; ease in meeting people (13)	0
21	health; physical vigor (14)	0
22	honesty; integrity; character (15)	0
23	loyalty to organization and to supervision (18)	0
24	mental health; adjustment to environment (19)	0
25	persistence; "sticktoitiveness" (21)	0
26	respect for authority, rights, property (24)	0
27	self-confidence; self-reliance (25)	0
28	self-expression; extroversion; assertiveness (26)	0

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "General Characteristics" Section
According to Frequency of "Above Average Performance" Responses

rank	item	number "outstanding" or "very good" responses
1	honesty; integrity; character (15)	72
2	cooperativeness; helpfulness (6)	66
3	morals; ethics (20)	65
4	courtesy; manners; etiquette (7)	64
5	respect for authority, rights, property (24)	64
6	cheerfulness; pleasantness (4)	62
7	dependability; reliability (9)	58
8	loyalty to organization and to supervision (18)	58
9	attendance regularity (3)	55
10	persistence; "sticktoitiveness" (21)	55
11	health; physical vigor (14)	54
12	adaptability (1)	53
13	alertness; intelligence; analytical ability (2)	53
14	effort; industry (11)	52
15	friendliness; ease in meeting people (13)	51
16	mental health; adjustment to environment (19)	51
17	sense of humor (27)	50
18	physical quickness; mobility; agility (22)	42
19	common sense; judgment (5)	40
20	poise; stability when under stress (23)	39
21	tactfulness; social awareness (28)	39
22	initiative; eagerness to accept responsibility (16)	37
23	desire for self-improvement and promotion (10)	36
24	enthusiasm; spirit; zeal; zest (12)	35
25	self-confidence; self-reliance (25)	32
26	self-expression; extroversion; assertiveness (21)	21
27	creativity; imagination (8)	20
28	leadership abilities; dominance (17)	15

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "General Characteristics" Section
According to Frequency of "Below Average Performances" Responses

rank	item	number "barely satisfactory" & "not satisfactory" responses*
1	self-expression; extroversion; assertiveness (26)	27
2	enthusiasm; spirit; zeal; zest (12)	23
3	leadership abilities; dominance (17)	21
4	initiative; eagerness to accept responsibility (16)	20
5	desire for self-improvement and promotion (10)	19
6	self-confidence; self-reliance (25)	19
7	friendliness; ease in meeting people (13)	18
8	creativity; imagination (8)	18
9	tactfulness; social awareness (28)	14
10	attendance regularity (3)	12
11	morals; ethics (11)	12
12	alertness; intelligence; analytical ability (2)	11
13	common sense; judgment (5)	11
14	dependability; reliability (9)	11
15	adaptability (1)	10
16	persistence; "stick-to-itiveness" (21)	9
17	poise; stability when under stress (23)	9
18	sense of humor (27)	9
19	courtesy; manners; etiquette (7)	8
20	health; physical vigor (14)	8
21	cheerfulness; pleasantness (4)	6
22	cooperativeness; helpfulness (6)	6
23	loyalty to organization and to supervision (18)	5
24	mental health; adjustment to environment (19)	5
25	physical quickness; mobility; agility (22)	4
26	respect for authority, rights, property (24)	4
27	honesty; integrity; character (15)	3
28	morals; ethics (20)	3

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "Personal" Section
According to Frequency of "Very Important" Responses

rank	item	number "very impnt." responses*
1	cleanliness (2)	68
2	grooming of hair, hands, and face (3)	58
3	overall personal appearance (1)	50
4	gets adequate sleep (9)	35
5	taste in clothing and accessories (4)	31
6	wisely chooses friends (10)	27
7	trimness of figure; weight? (5)	18
8	posture; gracefulness of movement (6)	16
9	eats wholesome foods; proper diet (8)	16
10	makes wise use of leisure time (12)	16
11	has a church affiliation (11)	14
12	has good housing (7)	12
13	is thrifty; buys wisely (13)	12

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "Personal" Section
According to Frequency of "Not Important" Responses*

rank	item	number "not impt." responses
1	has a church affiliation (11)	40
2	makes wise use of leisure time (12)	36
3	is thrifty; buys wisely (13)	35
4	trimness of figure; weight (5)	32
5	posture; gracefulness of movement (6)	29
6	has good housing (7)	26
7	eats wholesome foods; proper diet (8)	19
8	wisely chooses friends (10)	15
9	taste in clothing and accessories (4)	6
10	gets adequate sleep (9)	3
11	overall personal appearance (1)	0
12	cleanliness (2)	0
13	grooming of hair, hands, and face (3)	0

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "Personal" Section
According to Frequency of "Not Known" Responses

rank	item	number "not known" responses*
1	eats wholesome foods; proper diet (8)	53
2	is thrifty; buys wisely (13)	52
3	makes wise use of leisure time (12)	51
4	has a church affiliation (11)	49
5	gets adequate sleep (9)	44
6	wisely chooses friends (10)	37
7	has good housing (7)	25
8	posture; gracefulness of movement (6)	1
9	trimness of figure; weight (5)	1
10	overall personal appearance (1)	0
11	cleanliness (2)	0
12	grooming of hair, hands, and face (3)	0
13	taste in clothing and accessories (4)	0

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "Personal" Section
According to Frequency of "Above Average Performance" Responses

rank	item	number "outstanding" or "very good" responses*
1	cleanliness (2)	85
2	overall personal appearance (1)	78
3	grooming of hair, hands, and face (3)	77
4	taste in clothing and accessories (4)	68
5	trimness of figure; weight (5)	63
6	posture; gracefulness of movement (6)	55
7	gets adequate sleep (9)	34
8	has good housing (7)	33
9	wisely chooses friends (10)	32
10	has a church affiliation (11)	28
11	eats wholesome foods; proper diet (8)	23
12	is thrifty; buys wisely (13)	22
13	makes wise use of leisure time (12)	18

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "Personal" Section
According to Frequency of "Below Average Performance" Responses

rank	item	number "barely satisfactory" & "not satisfactory" responses*
1	posture; gracefulness of movement (6)	6
2	has good housing (7)	5
3	grooming of hair, hands, and face (3)	4
4	trimness of figure; weight (5)	4
5	wisely chooses friends (10)	4
6	is thrifty; buys wisely (13)	4
7	overall personal appearance (1)	3
8	taste in clothing and accessories (4)	3
9	gets adequate sleep (9)	3
10	makes wise use of leisure time (12)	3
11	cleanliness (2)	1
12	eats wholesome foods; proper diet (8)	1
13	has a church affiliation (11)	1

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "Work Habits" Section
According to Frequency of "Very Important" Responses

rank	item	number "very imp." responses*
1	follows directions, both oral and written	91
2	punctuality; arrives at work on time; prompt (1)	86
3	works accurately; takes pride in perfection (7)	83
4	asks relevant questions when necessary (8)	73
5	likes work, especially detail work (2)	72
6	establishes and meets work completion deadlines (16)	72
7	has good attitude toward supervision (10)	71
8	accepts criticism gracefully and complies (9)	63
9	avoids time loss caused by extended lunch periods (25)	63
10	organizes and plans work; budgets time (4)	62
11	works to day's end; not a clock-watcher (18)	62
12	does not need close supervision (5)	59
13	can "overproduce" in emergency situations (15)	59
14	avoids time loss caused by idle chit-chat (21)	59
15	avoids time loss caused by coffee break abuses (22)	57
16	avoids time loss caused by personal business and phone calls (24)	56
17	likes other employees (11)	55
18	avoids time loss caused by excess time in lounge or rest room (23)	55
19	keeps area and materials clean, orderly (13)	53
20	avoids time loss caused by friends dropping in (26)	53
21	is liked by other employees (12)	49
22	does not seek special treatment or favors (19)	47
23	generally works rapidly (6)	45
24	conserves supplies and materials (14)	44
25	does not annoy others with smoking (27)	34
26	does not annoy others with gum chewing (28)	33
27	anticipates supervisory requests (17)	30
28	willingly volunteers late work when needed (20)	30

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "Work Habits" Section
According to Frequency of "Not Important" Responses

rank	item	number "not impmt." responses*
1	does not annoy others with smoking (27)	25
2	does not annoy others with gum chewing (28)	25
3	willingly volunteers late work when needed (20)	20
4	does not seek special treatment or favors (19)	12
5	anticipates supervisory requests (17)	9
6	generally works rapidly (6)	5
7	is liked by other employees (12)	5
8	avoids time loss caused by coffee break abuses (22)	5
9	avoids time loss caused by excess time in lounge or rest room (23)	5
10	organizes and plans work; budgets time (4)	4
11	conserves supplies and materials (14)	4
12	can "overproduce" in emergency situations (15)	4
13	avoids time loss caused by personal business and phone calls (24)	4
14	avoids time loss caused by friends dropping in (26)	4
15	keeps area and materials clean, orderly (13)	3
16	establishes and meets work completion deadlines (16)	3
17	avoids time loss caused by extended lunch periods (25)	3
18	punctuality; arrives at work on time; prompt (1)	2
19	does not need close supervision (5)	2
20	asks relevant questions when necessary (8)	2
21	accepts criticism gracefully and complies (9)	2
22	likes other employees (11)	2
23	avoids time loss caused by idle chit-chat (21)	2
24	likes work, especially detail work (2)	1
25	has a good attitude toward supervision (10)	1
26	follows directions, both oral and written (3)	0
27	works accurately; takes pride in perfection (7)	0
28	works to day's end; not a clock-watcher (18)	0

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "Work Habits" Section
According to Frequency of "Not Known" Responses

rank	item	number "not known" responses*
1	willingly volunteers late work when needed (20)	16
2	anticipates supervisory requests (17)	6
3	is liked by other employees (12)	4
4	likes other employees (11)	3
5	organizes and plans work; budgets time (4)	2
6	can "overproduce" in emergency situations (15)	2
7	avoids time loss caused by excess time in lounge or rest room (25)	2
8	does not annoy others with gum chewing (28)	2
9	avoids time loss caused by coffee break abuses (22)	1
10	avoids time loss caused by personal business and phone calls (24)	1
11	avoids time loss caused by friends dropping in (26)	1
12	does not annoy others with smoking (27)	1
13	punctuality; arrives at work on time; prompt (1)	0
14	likes work, especially detail work (2)	0
15	follows directions, both oral and written (3)	0
16	does not need close supervision (5)	0
17	generally works rapidly (6)	0
18	works accurately; takes pride in perfection (7)	0
19	asks relevant questions when necessary (8)	0
20	accepts criticism gracefully and complies (9)	0
21	has good attitude toward supervision (10)	0
22	keeps area and materials clean, orderly (13)	0
23	conserves supplies and materials (14)	0
24	establishes and meets work completion deadlines (16)	0
25	works to day's end; not a clock-watcher (18)	0
26	does not seek special treatment or favors (19)	0
27	avoids time loss caused by idle chit-chat (21)	0
28	avoids time loss caused by extended lunch periods (25)	0

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scalee -- Part II

Rank Order Listing of Items in the "Work Habits" Section
According to Frequency of "Above Average Performance" Responses

rank	item	number "outstanding" or "very good" responses*
1	does not annoy others with gum chewing (28)	82
2	does not annoy others with smoking (27)	81
3	is liked by other employees (12)	69
4	does not seek special treatment or favors (19)	69
5	avoids time loss caused by extended lunch periods (25)	66
6	punctuality; arrives at work on time; prompt (1)	65
7	avoids time loss caused by personal business and phone calls (24)	65
8	avoids time loss caused by friends dropping in (26)	64
9	has a good attitude toward supervision (10)	64
10	likes other employees (11)	63
11	willingly volunteers late work when needed (13)	62
12	avoids time loss caused by excess time in lounge or rest room (23)	62
13	works to day's end; not a clock-watcher (18)	61
14	accepts criticism gracefully and complies (9)	55
15	establishes and meets work completion deadlines (18)	55
16	asks relevant questions when necessary (8)	54
17	avoids time loss caused by idle chit-chat (21)	53
18	avoids time loss caused by coffee break abuses (22)	53
19	conserves supplies and materials (14)	51
20	likes work, especially detail work (2)	50
21	follows directions, both oral and written (3)	50
22	works accurately; takes pride in perfection (7)	50
23	can "overproduce" in emergency situations (15)	48
24	willingly volunteers late work when needed (20)	48
25	generally works rapidly (6)	45
26	does not need close supervision (5)	44
27	organizes and plans work; budgets time (4)	36
28	anticipates supervisory requests (17)	35

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "Work Habits" Section
According to Frequency of "Below Average Performance" Responses

rank	item	number "barely satisfactory" & "not satisfactory" responses*
1	works accurately; takes pride in perfection (7)	18
2	organizes and plans work; budgets time (4)	17
3	generally works rapidly (6)	14
4	accepts criticism gracefully and complies (9)	14
5	can "overproduce" in emergency situations (15)	13
6	anticipates supervisory requests (17)	12
7	does not need close supervision (5)	12
8	asks relevant questions when necessary (8)	12
9	punctuality; arrives at work on time; prompt (1)	11
10	willingly volunteers late work when needed (20)	11
11	avoids time loss caused by idle chit-chat (21)	11
12	has a good attitude toward supervision (10)	10
13	establishes and meets work completion deadlines (16)	10
14	follows directions, both oral and written (3)	8
15	avoids time loss caused by personal business and phone calls (24)	7
16	likes work, especially detail work (2)	6
17	avoids time loss caused by coffee break abuses (22)	6
18	works to day's end; not a clock-watcher (18)	5
19	avoids time loss caused by extended lunch periods (25)	5
20	avoids time loss caused by friends dropping in (26)	5
21	likes other employees (11)	4
22	keeps area and materials clean, orderly (13)	4
23	does not annoy others with gum chewing (28)	4
24	is liked by other employees (12)	3
25	conserves supplies and materials (14)	2
26	does not seek special treatment or favors (19)	2
27	avoids time loss caused by excess time in lounge or rest room (23)	1
28	does not annoy others with smoking (27)	1

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "Typing" Section
According to Frequency of "Very Important" Responses

rank	item	number "very impnt." responses*
1	typing accuracy--straight copy (4)	73
2	proofreading accuracy; detects ALL errors (8)	70
3	typing accuracy--numbers, tabular, etc. (6)	66
4	erasing ability; quickly, neatly erases (9)	52
5	arrangement of work; artistic, original, functional, pleasing to the eye (10)	49
6	overall typing productivity--electric machines (2)	43
7	typing speed--numbers, tabular, etc. (5)	42
8	machine maintenance: cleanliness, ribbon replacement, minor repairs (11)	42
9	proofreading speed; scans rapidly (7)	40
10	overall typing productivity--manual machines (1)	37
11	typing speed--straight copy (3)	37
12	chain feeding ability: envelopes, labels, cards, etc. (12)	9

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "Typing" Section
According to Frequency of "Not Important" Responses

rank	item	number "not impnt." responses*
1	chain feeding ability: envelopes, labels, cards, etc. (12)	56
2	overall typing productivity--electric machines (2)	29
3	typing speed--numbers, tabular, etc. (5)	20
4	overall typing productivity--manual machines (1)	18
5	typing speed--straight copy (3)	17
6	proofreading speed; scans rapidly (7)	16
7	typing accuracy--numbers, tabular, etc. (6)	14
8	typing accuracy--straight copy (4)	12
9	arrangement of work: artistic, original, functional, pleasing to the eye (10)	11
10	proofreading accuracy; detects ALL errors (8)	8
11	erasing ability; quickly, neatly erases (9)	6
12	machine maintenance: cleanliness, ribbon replacement, minor repairs (11)	6

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales — Part II

Rank Order Listing of Items in the "Typing" Section
According to Frequency of "Not Known" Responses

rank	item	number "not known" responses*
1	chain feeding ability: envelopes, labels, cards, etc. (12)	55
2	overall typing productivity—electric machines (2)	24
3	overall typing productivity—manual machines (1)	20
4	typing speed—numbers, tabular, etc. (5)	16
5	typing accuracy—numbers, tabular, etc. (6)	15
6	typing speed—straight copy (3)	14
7	typing accuracy—straight copy (4)	11
8	proofreading speed; scans rapidly (7)	10
9	proofreading accuracy; detects ALL errors (8)	7
10	erasing ability; quickly, neatly, erases (9)	7
11	arrangement of work: artistic, original, functional, pleasing to the eye (10)	6
12	machine maintenance: cleanliness, ribbon replacement, minor repairs (11)	3

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "Typing" Section
According to Frequency of "Above Average Performance" Responses

rank	item	number "outstanding" or "very good" responses*
1	typing speed--straight copy (3)	49
2	overall typing productivity--manual machines (1)	47
3	typing accuracy--straight copy (4)	46
4	machine maintenance: cleanliness, ribbon replacement, minor repairs (11)	46
5	typing accuracy--numbers, tabular, etc. (6)	44
6	arrangement of work: artistic, original, functional, pleasing to the eye (10)	42
7	erasing ability; quickly, neatly erases (9)	40
8	typing speed--numbers, tabular, etc. (5)	39
9	proofreading speed; scans rapidly (7)	38
10	overall typing productivity--electric machines (2)	37
11	proofreading accuracy; detects ALL errors (8)	31
12	chain feeding ability: envelopes, labels, cards, etc. (12)	21

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "Typing" Section
According to Frequency of "Below Average Performance" Responses

rank	item	number "barely satisfactory" & "not satisfactory" responses*
1	proofreading accuracy; detects ALL errors (8)	16
2	typing accuracy--straight copy (4)	10
3	erasing ability; quickly, neatly erases (9)	9
4	proofreading speed; scans rapidly (7)	8
5	typing accuracy--numbers, tabular, etc. (6)	5
6	typing speed--straight copy (3)	4
7	overall typing productivity--electric machines (2)	3
8	typing speed--numbers, tabular, etc. (5)	3
9	overall typing productivity--manual machines (1)	2
10	arrangement of work: artistic, original, functional, pleasing to the eye (10)	2
11	machine maintenance: cleanliness, ribbon replacement, minor repairs (11)	2
12	chain feeding ability: envelope, labels, cards, etc. (12)	0

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "Shorthand and Transcription" Section
According to Frequency of "Very Important" Responses

rank	item	number "very imp." responses*
1	transcription accuracy (6)	39
2	overall shorthand-transcription production (1)	29
3	familiarity with common terms and jargon (9)	19
4	shorthand writing speed (2)	19
5	ability to transcribe from "cold" notes (10)	19
6	transcription speed (5)	17
7	non-interruption of dictator (3)	14
8	ability to write shorthand notes so that others may transcribe therefrom (7)	3
9	takes notes in non-office setting; on tours, inspection trips, etc. (4)	1
10	ability to transcribe notes of others (8)	1

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "Shorthand and Transcription" Section
According to Frequency of "Not Important" Responses

rank	item	number "not impt." responses*
1	takes notes in non-office setting; on tours, inspection trips, etc. (4)	86
2	ability to write shorthand notes so that others may transcribe therefrom (7)	80
3	ability to transcribe notes of others (8)	77
4	non-interruption of dictator (3)	52
5	ability to transcribe from "cold" notes (10)	50
6	shorthand writing speed (2)	43
7	transcription speed (5)	43
8	familiarity with common terms and jargon (9)	42
9	overall shorthand-transcription production (1)	41
10	transcription accuracy (6)	41

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "Shorthand and Transcription" Section
According to Frequency of "Not Known" Responses

rank	item	number "not known" responses*
1	takes notes in non-office setting; on tours, inspection trips, etc. (4)	78
2	ability to write shorthand notes so that others may transcribe therefrom (7)	72
3	ability to transcribe notes of others (8)	71
4	ability to transcribe from "cold" notes (10)	48
5	non-interruption of dictator (3)	44
6	overall shorthand-transcription production (1)	38
7	shorthand writing speed (2)	38
8	familiarity with common terms and jargon (9)	38
9	transcription speed (5)	37
10	transcription accuracy (6)	37

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "Shorthand and Transcription" Section
According to Frequency of "Above Average Performance" Responses

rank	item	number "outstanding" or "very good" responses*
1	non-interruption of dictator (3)	27
2	overall shorthand-transcription production (1)	26
3	shorthand writing speed (2)	25
4	transcription accuracy (6)	22
5	transcription speed (5)	21
6	familiarity with common terms and jargon (9)	17
7	ability to transcribe from "cold" notes (10)	15
8	ability to write shorthand notes so that others may transcribe therefrom (7)	7
9	ability to transcribe notes of others (8)	7
10	takes notes in non-office setting; on tours, inspection trips, etc. (4)	5

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "Shorthand and Transcription" Section
According to Frequency of "Below Average Performance" Responses

rank	item	number "barely satisfactory" & "not satisfactory" responses*
1	transcription accuracy (6)	12
2	overall shorthand-transcription production (1)	11
3	shorthand writing speed (2)	10
4	transcription speed (5)	10
5	ability to transcribe from "cold" notes (10)	8
6	non-interruption of dictator (3)	4
7	ability to write shorthand notes so that others may transcribe therefrom (7)	4
8	familiarity with common terms and jargon (9)	4
9	ability to transcribe notes of others (8)	3
10	takes notes in non-office setting; on tours, inspection trips, etc. (4)	2

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales -- Part II

"Voice Writing" Section

Since the Voice Writing section is so small, tabulation is quite unnecessary. Operation of voice writing machines was considered slightly less important (13 very important responses) than was typing production from voice sources (16 very important responses). "Not important" responses numbered 64 and 65, respectively. Neither item was well known; there were 61 "not known" responses for operation of machines, and 63 "not known" responses for typing production from voice sources.

Above average performance was indicated by 10 such responses for each. The second item received three "outstanding" responses. Operation of voice writing machines was given four barely satisfactory ratings, and typing production from voice sources received three such votes.

Occupational Proficiency Rating Scales — Part II

Rank Order Listing of Items in the "Business English" Section
According to Frequency of "Very Important" Responses

rank	item	number "very impnt." responses*
1	punctuates, capitalizes, abbreviates properly (14)	69
2	spells well (13)	69
3	uses proper English in writing (10)	58
4	filing skills: speed, accuracy, production (17)	57
5	has a good writing vocabulary (11)	50
6	uses telephone capably (9)	48
7	speaks loudly enough to be heard (4)	42
8	has a pleasing voice and manner (6)	41
9	use of proper English when speaking (2)	36
10	can compose a good memo or business letter (12)	35
11	overall speaking ability (1)	33
12	pronounces words correctly, enunciates clearly, speaks without accent (5)	33
13	has good eye contact; at ease when speaking (7)	32
14	functions well as receptionist or guide (8)	32
15	penmanship; writes legibly and neatly (15)	30
16	has a good speaking vocabulary (3)	27
17	competence in telegram composition (18)	17
18	ability to read land description maps (19)	6

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "Business English" Section
According to Frequency of "Not Important" Responses

rank	item	number "not imp." responses*
1	ability to read land description maps (19)	81
2	competence in telegram composition (18)	48
3	functions well as receptionist or guide (8)	30
4	penmanship; writes legibly and neatly (15)	28
5	can compose a good memo or business letter (12)	24
6	has a good writing vocabulary (11)	16
7	has good eye contact; at ease when speaking (7)	15
8	pronounces words correctly, enunciates clearly, speaks without accent (5)	14
9	uses proper English in writing (10)	12
10	uses telephone capably (9)	11
11	filing skills: speed, accuracy, production (17)	11
12	speaks loudly enough to be heard (4)	10
13	has a pleasing voice and manner (6)	9
14	overall speaking ability (1)	8
15	spells well (13)	8
16	has a good speaking vocabulary (3)	7
17	punctuates, capitalizes, abbreviates properly (14)	7
18	use of proper English when speaking (2)	6

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "Business English" Section
According to Frequency of "Not Known" Responses

rank	item	number "not known" responses*
1	ability to read land description maps (19)	77
2	competence in telegram composition (18)	47
3	functions well as receptionist or guide (8)	26
4	can compose a good memo or business letter (12)	26
5	has a good writing vocabulary (11)	13
6	uses proper English in writing (10)	12
7	uses telephone capably (9)	9
8	filing skills: speed, accuracy, production (17)	9
9	spells well (13)	8
10	punctuates, capitalizes, abbreviates properly (14)	7
11	penmanship; writes legibly and neatly (15)	6
12	has a good speaking vocabulary (3)	3
13	use of proper English when speaking (2)	2
14	speaks loudly enough to be heard (4)	2
15	pronounces words correctly, enunciates clearly, speaks without accent (5)	2
16	has a pleasing voice and manner (6)	2
17	has good eye contact; at ease when speaking (7)	2
18	overall speaking ability (1)	1

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "Business English" Section
According to Frequency of "Above Average Performance" Responses

rank	item	number "outstanding" or "very good" responses*
1	has a pleasing voice and manner (6)	52
2	penmanship; writes legibly and neatly (15)	52
3	spells well (13)	46
4	use of proper English when speaking (2)	43
5	overall speaking ability (1)	41
6	filing skills: speed, accuracy, production (17)	40
7	uses telephone capably (9)	39
8	punctuates, capitalizes, abbreviates properly (14)	38
9	has a good speaking vocabulary (3)	37
10	uses proper English in writing (10)	37
11	functions well as receptionist or guide (8)	36
12	pronounces words correctly, enunciates clearly, speaks without accent (5)	35
13	has good eye contact; at ease when speaking (7)	34
14	has a good writing vocabulary (11)	34
15	speaks loudly enough to be heard (4)	33
16	can compose a good memo or business letter (12)	27
17	competence in telegram composition (18)	16
18	ability to read land description maps (19)	4

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "Business English" Section
According to Frequency of "Below Average Performance" Responses

rank	item	number "barely satisfactory" & "not satisfactory" responses*
1	speaks loudly enough to be heard (4)	17
2	has good eye contact; at ease when speaking (7)	16
3	can compose a good memo or business letter (12)	16
4	functions well as receptionist or guide (8)	10
5	uses proper English in writing (10)	10
6	has a good speaking vocabulary (3)	10
7	overall speaking ability (1)	9
8	pronounces words correctly, enunciates clearly, speaks without accent (5)	9
9	uses telephone capably (9)	8
10	punctuates, capitalizes, abbreviates properly (14)	8
11	has a good writing vocabulary (11)	7
12	spells well (13)	7
13	filing skills: speed, accuracy, production (17)	6
14	use of proper English when speaking (2)	5
15	has a pleasing voice and manner (6)	5
16	competence in telegram composition (18)	3
17	ability to read land description maps (19)	3
18	penmanship; writes legibly and neatly (15)	0

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "Bookkeeping and Accounting" Section
According to Frequency of "Very Important" Responses

rank	item	number "very impnt." responses*
1	understanding of simple records (4)	30
2	accuracy in doing bookkeeping and accounting (3)	29
3	ability to post rapidly and accurately (8)	23
4	general bookkeeping and accounting proficiency (1)	19
5	understanding of complex records (5)	18
6	speed in doing bookkeeping & accounting work (2)	17
7	ability to prepare work sheets (10)	17
8	ability to detect accounting errors (15)	16
9	understanding of the bookkeeping cycle (6)	13
10	preparation of financial statements (11)	10
11	proficiency in payroll accounting (13)	10
12	ability to analyze business transactions and to journalize same (7)	9
13	preparation of statements of account (12)	9
14	computation of accounts receivable & payable (9)	8
15	proficiency in tax accounting (14)	8
16	preparation of bank checks & stubs (16)	4
17	reconciliation of bank statements (17)	3

*numbers given constitute percentage figures also,
since total possible response was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "Bookkeeping and Accounting" Section
According to Frequency of "Not Important" Responses

rank	item	number "not imp." responses*
1	reconciliation of bank statements (17)	90
2	preparation of bank checks and stubs (16)	89
3	proficiency in tax accounting (14)	84
4	computation of accounts receivable and payable (9)	81
5	preparation of statements of account (12)	81
6	preparation of financial statements (11)	80
7	proficiency in payroll accounting (13)	80
8	ability to analyze business transactions and to journalize same (7)	74
9	ability to detect accounting errors (15)	73
10	understanding of the bookkeeping cycle (6)	69
11	ability to prepare work sheets (10)	69
12	speed in doing bookkeeping & accounting work (2)	67
13	understanding of complex records (5)	64
14	ability to post rapidly and accurately (8)	64
15	general bookkeeping & accounting proficiency (1)	63
16	accuracy in doing bookkeeping & accounting (3)	61
17	understanding of simple records (4)	43

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "Bookkeeping and Accounting" Section
According to Frequency of "Not Known" Responses

rank	item	number "not known" responses*
1	reconciliation of bank statements (17)	88
2	preparation of bank checks and stubs (16)	87
3	proficiency in tax accounting (14)	84
4	computation of accounts receivable and payable (9)	78
5	preparation of financial statements (11)	78
6	preparation of statements of accounts (12)	78
7	proficiency in payroll accounting (13)	78
8	ability to analyze business transactions and to journalize same (7)	75
9	ability to detect accounting errors (15)	68
10	understanding of the bookkeeping cycle (6)	65
11	ability to prepare work sheets (10)	65
12	general bookkeeping & accounting proficiency (1)	61
13	speed in doing bookkeeping & accounting work (2)	61
14	accuracy in doing bookkeeping & accounting (3)	60
15	ability to post rapidly and accurately (8)	58
16	understanding of complex records (5)	56
17	understanding of simple records (4)	45

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "Bookkeeping and Accounting" Section
According to Frequency of "Above Average Performance" Responses

rank	item	number "outstanding" or "very good" responses*
1	understanding of simple records (4)	21
2	general bookkeeping and accounting proficiency (1)	17
3	accuracy in doing bookkeeping and accounting (3)	15
4	ability to post rapidly and accurately (8)	14
5	understanding of complex records (5)	13
6	speed in doing bookkeeping and accounting work (2)	12
7	ability to prepare work sheets (10)	12
8	ability to detect accounting errors (15)	10
9	understanding of the bookkeeping cycle (6)	9
10	preparation of financial statements (11)	9
11	preparation of statements of account (12)	9
12	ability to analyze business transactions and to journalize same (7)	8
13	computation of accounts receivable & payable (9)	8
14	proficiency in payroll accounting (13)	8
15	proficiency in tax accounting (14)	4
16	reconciliation of bank statements (17)	3
17	preparation of bank checks & stubs (16)	2

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "Bookkeeping and Accounting" Section
According to Frequency of "Below Average Performance" Responses

rank	item	number "barely satisfactory" & "not satisfactory" responses*
1	ability to analyze business transactions and to journalize same (7)	9
2	understanding of complex records (5)	9
3	accuracy in doing bookkeeping and accounting (3)	5
4	understanding of the bookkeeping cycle (6)	5
5	general bookkeeping & accounting proficiency (1)	4
6	speed in doing bookkeeping & accounting work (2)	4
7	understanding of simple records (4)	3
8	ability to post rapidly and accurately (8)	3
9	ability to detect accounting errors (15)	3
10	computation of accounts receivable & payable (9)	2
11	ability to prepare work sheets (10)	2
12	preparation of financial statements (11)	2
13	proficiency in payroll accounting (13)	2
14	preparation of statements of account (12)	1
15	proficiency in tax accounting (14)	0
16	preparation of bank checks & stubs (16)	0
17	reconciliation of bank statements (17)	0

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "Business Mathematics" Section
According to Frequency of "Very Important" Responses

rank	item	number "very impnt." responses*
1	arithmetic accuracy (4)	29
2	overall business arithmetic production (1)	19
3	decimal point usage (12)	15
4	knowledge of the four basic math processes (2)	14
5	computation of percentage (9)	13
6	numbers penmanship; writes neatly, legibly (5)	12
7	ability to convert problem situations to numerical terms and to solve them (6)	12
8	arithmetic speed (3)	11
9	ability to do abstract reasoning (7)	11
10	fractions, knowledge and use of (10)	11
11	computation of discount periods & discounts (8)	5
12	ratios, knowledge and use of (11)	4
13	computation of interest (15)	4
14	depreciation computation (13)	0
15	preparation of graphs, and understanding same (14)	0

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "Business Mathematic" Section
According to Frequency of "Not Important" Responses

rank	item	number "not imp." responses*
1	depreciation computation (13)	92
2	computation of interest (15)	88
3	computation of discount periods and discounte (8)	86
4	preparation of graphs, and understanding same (14)	82
5	ratios, knowledge and use of (11)	77
6	ability to convert problem situations to numerical terms and to solve them (6)	72
7	ability to do abstract reasoning (7)	63
8	computation of percentage (9)	63
9	arithmetic speed (3)	60
10	fractions, knowledge and use of (10)	59
11	overall business arithmetic production (1)	58
12	decimal point usage (12)	54
13	knowledge of the four basic math processes (2)	53
14	numbers penmanship; writes neatly, legibly (5)	46
15	arithmetic accuracy (4)	44

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "Business Mathematics" Section
According to Frequency of "Not Known" Responses

rank	item	number "not known" responses*
1	depreciation computation (13)	86
2	preparation of graphs, and understanding same (14)	82
3	computation of interest (15)	82
4	computation of discount periods and discounts (8)	80
5	ratios, knowledge and use of (11)	79
6	ability to convert problem situations to numerical terms and to solve them (6)	70
7	computation of percentage (9)	63
8	ability to do abstract reasoning (7)	61
9	fractions, knowledge and use of (10)	60
10	overall business arithmetic production (1)	58
11	decimal point usage (12)	57
12	knowledge of the four basic math processes (2)	56
13	arithmetic speed (3)	55
14	arithmetic accuracy (4)	48
15	numbers penmanship; writes neatly, legibly (5)	36

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "Business Mathematics" Section
According to Frequency of "Above Average Performance" Responses

rank	item	number "outstanding" or "very good" responses*
1	numbers penmanship; writes neatly, legibly (5)	39
2	arithmetic accuracy (4)	22
3	overall business arithmetic production (1)	19
4	knowledges of the four basic math processes (2)	15
5	decimal point usage (12)	14
6	arithmetic speed (3)	13
7	fractions, knowledge and use of (10)	12
8	ability to do abstract reasoning (7)	11
9	computation of percentage (9)	11
10	ability to convert problem situations to numerical terms and to solve them (6)	7
11	computation of discount periods & discounts (8)	4
12	ratios, knowledge and use of (11)	4
13	computation of interest (15)	3
14	depreciation computation (13)	1
15	preparation of graphs, and understanding same (14)	1

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "Business Mathematics" Section
According to Frequency of "Below Average Performance" Responses

rank	item	number "barely satisfactory" & "not satisfactory" responses*
1	ratios, knowledge and use of (11)	6
2	fractions, knowledge and use of (10)	5
3	ability to do abstract reasoning (7)	5
4	arithmetic accuracy (4)	3
5	computation of percentage (9)	3
6	decimal point usage (12)	3
7	preparation of graphs, and understanding same (14)	3
8	knowledge of the four basic math processes (2)	2
9	arithmetic speed (3)	2
10	ability to convert problem situations to numerical terms and to solve them (6)	2
11	computation of discount periods & discounts (8)	2
12	depreciation & computation (13)	2
13	overall business arithmetic production (1)	1
14	numbers penmanship; writes neatly, legibly (5)	1
15	computation of interest (15)	1

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "Business Law" Section
According to Frequency of "Very Important" Responses

rank	item	number "very impnt." responses*
1	overall knowledge of business law (1)	8
2	knowledge of employer-employee legal relations (4)	7
3	knowledge of motor vehicle laws (7)	7
4	knowledge of negotiable instrumente law (5)	7
5	knowledge of elementary contract law (2)	7
6	knowledge of elementary insurance law (6)	5
7	knowledge of debtor-creditor relations (8)	3
8	knowledge of buyer-seller legal relations (3)	2
9	knowledge of elementary insurance law (9)	1
10	knowledge of the law of business organization (10)	1

*numbers given constitute percentage figuree also,
since total possible responses was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "Business Law" Section
According to Frequency of "Not Important" Responses

rank	item	number "not impt." responses*
1	knowledge of buyer-seller legal relations (3)	88
2	knowledge of the law of business organization (10)	86
3	knowledge of elementary insurance law (6)	86
4	knowledge of elementary property law (9)	85
5	knowledge of debtor-creditor relations (8)	84
6	knowledge of negotiable instruments law (5)	84
7	knowledge of elementary contract law (2)	79
8	knowledge of employer-employee legal relations (4)	78
9	knowledge of motor vehicle laws (7)	78
10	overall knowledge of business law (1)	76

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "Business Law" Section
According to Frequency of "Not Known" Responses

rank	item	number "not known." responses*
1	knowledge of elementary insurance law (6)	85
2	knowledge of buyer-seller legal relations (3)	83
3	knowledge of elementary property law (9)	83
4	knowledge of the law of business organization (10)	83
5	knowledge of negotiable instruments law (5)	82
6	knowledge of debtor-creditor relations (8)	82
7	overall knowledge of business law (1)	79
8	knowledge of elementary contract law (2)	79
9	knowledge of employer-employee legal relations (4)	78
10	knowledge of motor vehicle laws (7)	78

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "Business Law" Section
According to Frequency of "Above Average Performance" Responses

rank	item	number "outstanding" or "very good" responses*
1	knowledge of debtor-creditor relations (8)	5
2	knowledge of motor vehicle laws (7)	4
3	knowledge of employer-employee legal relations (4)	3
4	knowledge of negotiable instruments law (5)	3
5	knowledge of the law of business organization (10)	3
6	overall knowledge of business law (1)	2
7	knowledge of elementary contract law (2)	2
8	knowledge of buyer-seller legal relations (3)	2
9	knowledge of elementary property law (9)	2
10	knowledge of elementary insurance law (6)	0

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "Business Law" Section
According to Frequency of "Below Average Performance" Responses

rank	item	number "barely satisfactory" & "not satisfactory" responses*
1	knowledge of motor vehicle laws (7)	5
2	knowledge of elementary property law (9)	4
3	overall knowledge of business law (1)	4
4	knowledge of the law of business organization (10)	4
5	knowledge of elementary contract law (2)	3
6	knowledge of buyer-seller legal relations (3)	3
7	knowledge of employer-employee legal relations (4)	3
8	knowledge of negotiable instruments law (5)	3
9	knowledge of debtor-creditor relations (8)	3
10	knowledge of elementary insurance law (6)	2

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "Calculators" Section
According to Frequency of "Very Important" Responses

rank	item	number "very impnt." responses*
1	skilled operation of ten-key adding listing machine (2)	23
2	ability to change tapes, change ribbons, and make minor repairs (6)	21
3	skilled operation of rotary calculating machine (3)	7
4	skilled operation of full-keyboard adding listing machine (1)	6
5	skilled operation of key-driven calculator (4)	6

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales — Part II

Rank Order Listing of Items in the "Calculators" Section
According to Frequency of "Not Important" Responses

rank	item	numbers "not impnt." responses*
1	skilled operation of rotary calculating machine (3)	81
2	skilled operation of key-driven calculator (4)	77
3	skilled operation of full-keyboard adding listing machine (1)	74
4	skilled operation of ten-key adding listing machine (2)	46
5	ability to change tapes, change ribbons, make minor repairs (6)	34

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "Calculators" Section
According to Frequency of "Not Known" Responses

rank	item	number "not known" responses*
1	skilled operation of rotary calculating machine (3)	74
2	skilled operation of full-keyboard adding listing machine (1)	70
3	skilled operation of key-driven calculator (4)	69
4	skilled operation of ten-key adding listing machine (2)	47
5	ability to change tapes, change ribbons, make minor repairs (6)	32

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales — Part II

Rank Order Listing of Items in the "Calculators" Section
According to Frequency of "Above Average Performance" Responses

rank	item	number "outstanding" or "very good" responses*
1	ability to change tapes, change ribbons, make minor repairs (6)	35
2	skilled operation of ten-key adding listing machine (2)	29
3	skilled operation of full-keyboard adding listing machine (1)	9
4	skilled operation of rotary calculating machine (3)	9
5	skilled operation of key-driven calculator (4)	8

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "Calculators" Section
According to Frequency of "Below Average Performance" Responses

rank	item	number "barely satisfactory" & "not satisfactory" responses*
1	skilled operation of key-driven calculator (4)	5
2	skilled operation of full-keyboard adding listing machine (1)	2
3	skilled operation of ten-key adding listing machine (2)	2
4	skilled operation of rotary calculating machine (3)	2
5	ability to change tapes, change ribbons, make minor repairs (6)	1

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "Duplicating Machines" Section
According to Frequency of "Very Important" Responses

rank	item	number "very impt." responses*
1	assembles duplicated work neatly and in proper order; staples work neatly (12)	38
2	does not waste stencils, masters, or paper (13)	35
3	makes good corrections on stencils (7)	34
4	cutting of ink-type duplicating stencil (1)	33
5	turns out clean, attractive, unsmudged work (11)	32
6	typing of spirit-type duplicator master sheets (2)	27
7	keeps machines clean and in good condition (9)	27
8	makes good corrections on stencil (8)	24
9	keeps self and clothes clean in operation (10)	23
10	operation of spirit-type duplicating machines (4)	18
11	operation of photostatic copiers (5)	15
12	operation of ink-type duplicating machines (3)	13
13	use of drawing board, stylus, and plates in stencil preparation (6)	4

*numbers given constitute percentage figures also,
since total possible response was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "Duplicating Machines" Section
According to Frequency of "Not Important" Responses

rank	item	number "not imp." responses*
1	use of drawing board, stylus, and plates in stencil preparation (6)	72
2	operation of ink-type duplicating machines (3)	55
3	operation of spirit-type duplicating machine (4)	55
4	operation of photostatic copier (5)	49
5	makes good corrections on spirit masters (8)	48
6	keeps machines clean and in good condition (9)	47
7	typing of spirit-type duplicator master sheets (2)	45
8	keeps self and clothes clean in operation (10)	38
9	cutting of ink-type duplicator stencils (1)	36
10	makes good corrections on stencils (7)	32
11	turns out clean, attractive, unsmudged work (11)	31
12	assembles duplicated work neatly and in proper order; staples work neatly (12)	29
13	does not waste stencils, masters, or paper (13)	27

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "Duplicating Machines" Section
According to Frequency of "Not Known" Responses

rank	item	number "not known" responses*
1	use of drawing board, stylus, and plate in stencil preparation (6)	67
2	operation of spirit-type duplicating machine (4)	58
3	operation of ink-type duplicating machine (3)	57
4	makes good corrections on spirit masters (8)	51
5	operation of photostatic copier (5)	50
6	keeps machines clean and in good condition (9)	47
7	typing of spirit-type duplicator master sheets (2)	43
8	cutting of ink-type duplicator stencils (1)	38
9	makes good corrections on stencils (7)	36
10	keeps self and clothes clean in operation (10)	34
11	turns out clean, attractive, unsmudged work (11)	32
12	assembles duplicated work neatly and in proper order; staples work neatly (12)	32
13	does not waste stencils, masters, or paper (13)	31

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales — Part II

Rank Order Listing of Items in the "Duplicating Machines" Section
According to Frequency of "Above Average Performance" Responses

rank	item	number "outstanding" or "very good" responses*
1	keeps self and clothes clean in operation (10)	40
2	assembles duplicated work neatly and in proper order; staples work neatly (12)	39
3	turns out clean, attractive, unsmudged work (11)	36
4	cutting of ink-type duplicator stencils (1)	34
5	does not waste stencils, masters, or paper (13)	33
6	makes good corrections on stencils (7)	32
7	typing of spirit-type duplicator master sheets (2)	30
8	operation of photostatic copiers (5)	26
9	keeps machines clean and in good condition (9)	23
10	operation of spirit-type duplicating machines (4)	21
11	makes good corrections on spirit masters (8)	20
12	operation of ink-type duplicating machines (3)	14
13	use of drawing board, stylus, and plate in stencil preparation (6)	10

*numbers given constitute percentage figures also,
since total possible responses was 100

Occupational Proficiency Rating Scales -- Part II

Rank Order Listing of Items in the "Duplicating Machines" Section
According to Frequency of "Below Average Performance" Responses

rank	item	number "barely satisfactory" & "not satisfactory" responses*
1	operation of ink-type duplicating machine (3)	3
2	does not waste stencils, masters, or paper (13)	3
3	operation of spirit-type duplicating machine (4)	2
4	use of drawing board, stylus, and plates in stencil preparation (6)	2
5	cutting of ink-type duplicator stencils (1)	1
6	operation of photostatic copiers (5)	1
7	makes good corrections on stencils (7)	1
8	makes good corrections on spirit masters (8)	1
9	keeps machines clean and in good condition (9)	1
10	keeps self and clothes clean in operation (10)	1
11	turns out clean, attractive, unsmudged work (11)	1
12	assembles duplicated work neatly and in proper order; staples work neatly (12)	1
13	typing of spirit-type duplicator master sheets (2)	0

*numbers given constitute percentage figures also,
since total possible responses was 100

A SURVEY OF THE OPINIONS OF OFFICE PRACTICE SUPERVISORS AND EMPLOYERS
TO DETERMINE COMPETENCIES OF GRADUATES OF THE HASKELL INSTITUTE
COMMERCIAL DEPARTMENT, CLASSES OF 1957, 1958, AND 1959

by

J. BRUCE LAUGHLIN

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It was the purpose of this study to obtain the opinions, as objectively as possible, of office practice supervisors and employers concerning the competencies of recent graduates of the Haskell Institute Commercial Department, a two year post high school training division for Indians. Opinions were sought, not only as to performance, but as to relative job importance, for each subject area in the curriculum. In addition, opinions were sought concerning the quality of instruction and the appropriateness of time spent in training in each subject area, based on the performances of Haskell-trained subordinates.

It was the purpose of both surveys to obtain responses which could later be evaluated to learn strengths and weaknesses of the curriculum, for purposes of improvement. By learning what the students had not done well for their employers, it was thought that the school could learn what it had not done for the students.

The original purpose of Part I of the study, the survey of 15 office practice supervisors concerning 19 trainees, was simply to improve the materials and procedures to be used in the major survey of employers, Part II. However, the results obtained were so significant that the first purpose became secondary, and Part I was used to actually evaluate the office practice program.

A series of rating scales was developed, including an Instructional Efficiency Rating Scale, an Instructional Area Time Allotment Evaluation, and 12 Occupational Proficiency Rating Scales: General; Work Habits; Personal; Typing; Shorthand & Transcription; Voice Writing; English; Bookkeeping & Accounting; Mathematics; Law; Adding Machines & Calculators; and Duplicating Machines. Ten subject areas were listed in each of the first two scales.

There were 171 items in the other set of scales, each to be answered twice—once as to relative importance to position held by ratee, and once as to quality of performance by ratee. Teachers helped list the items used in the set of scales. The same rating scales were used in both parts of the study.

The survey of office practice supervisors was conducted in January, 1960. Results indicated that a survey of employers would be very worthwhile. Employers of the 199 graduates of 1957, 1958, and 1959 were selected as the Part II respondent group because of the recency of employee training. After a preliminary questionnaire verified the location of about three-fourths of the graduates and identified their supervisors, 148 sets of rating scales were mailed, most of them in June, 1960. One hundred and five sets (71 per cent) were completed and returned in usable form; within this number, three employees were evaluated twice. By removing the duplicate ratings and the two ratings last received, the respondent computation group was reduced to 100; this facilitated per cent computations without distorting the results. The writer key punched and sorted the more than 35,000 Part II individual item responses on IBM equipment at the University of Kansas Computation Center. Results of Part I, only one-fifth the size of Part II, were hand tabulated.

Only the most important findings of this study have been abstracted.

Results From Part I. The office practice program at Haskell Institute was found to make little or no application of much of the training received in certain skill or subject areas, notably Business Law, Voice Writing, and Bookkeeping & Accounting. There was considerable evidence that the amount of time spent in office practice training is inadequate. Office practice supervisors felt little competence in being able to judge the performance or

training of their office practice students, even though these students were assigned to them for nine-week periods. Since, in the expressed opinion of supervisors, training needed for satisfactory office practice performance was much less than that required in the commercial curriculum, results of Part I called for a survey of employers of graduates to determine whether a like disparity exists in real employment situations between training provided and training thought by employers to be necessary or adequate.

Results From Part II. The overall quality of instruction in the Commercial Department at Haskell Institute, in the opinion of employers of 100 recent graduates, has been generally satisfactory; instruction has been best in Typing and least effective in Business English and Shorthand & Transcription, based on total numbers of "above average performance" and "below average performance" responses. Based on employer opinions as to the needs of jobs held by recent graduates, training time appears to be excessive in Business Law, Voice Writing, Bookkeeping & Accounting, and Business Mathematics.

Items which employers regarded as most important, taking the item which received the largest number of "very important" responses in each of the 12 sections of the Occupational Proficiency Rating Scales, were: dependability; cleanliness; ability to follow directions; typing accuracy—straight copy; transcription accuracy; (none in Voice Writing); ability to punctuate, capitalize and abbreviate properly; understanding of simple records; arithmetic accuracy; (none in Law); skilled operation of ten-key adding listing machine; and ability to assemble and staple duplicated work neatly.

Items which employers regarded as least well performed, taking the item which received the largest number of "below average performance" responses in each of the 12 sections of the Occupational Proficiency Rating Scales, were:

self-expression; posture; general accuracy of work; proofreading accuracy; transcription accuracy; operation of voice writing machine; speaking loudly enough to be heard; ability to analyze business transactions and journalize same; knowledge and use of ratios; knowledge of motor vehicle laws; skilled operation of key-driven calculator; and operation of ink-type duplicating machine.

The need for establishing priorities for deficiency reduction may be noted as follows: in the Typing section, proofreading accuracy was rated extremely important, but least well performed; in the General Characteristics section, the leadership abilities item was rated poorly performed, but also least important. So far as employers are concerned, the first deficiency would seem more serious than the second.

The most significant outcomes from this study do not appear in this paper, but will accrue as the Commercial staff interprets the results of the surveys and decides to take remedial action.