

CURRENT OFFICE PRACTICES AND PROCEDURES WITH  
IMPLICATIONS FOR DEVELOPING OCCUPATIONAL INTELLIGENCE

by

James Curtis Hall

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APPROVED:

APPROVED:

Meris A. Purdee  
Director of Graduate Studies

H. N. Sanders  
Head of Department

E. B. [Signature]  
Dean of Applied Science and  
Business Administration

Harry Huffman  
Supervisor or Major Professor

May, 1952

Blacksburg, Virginia

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## CHAPTER I

### THE PROBLEM

#### Need and Importance of the Study

In his discussion of the objectives of business education, Nichols lists three defensible vocational objectives. They are:

1. Building an adequate background of general education of a sort which insures a high degree of social understanding; developing right social attitudes and habits of thought and action.
2. Development of a certain amount of occupational intelligence with respect to business organization, management, service, and employments to insure proper functioning on lower levels of employment and ultimate advancement to higher levels.
3. Development of the degree of technical skill required for initial employment.<sup>1</sup>

Traditionally business education teachers have placed great emphasis on skill development. Much attention and study have been given to the development of improved techniques for teaching the skills such as typewriting and shorthand. The primary problem has been to find ways by which the student can acquire the greatest amount of skill in the shortest possible time. This emphasis on skill development is based upon the belief that every young person who so desires should be given the opportunity to acquire at least one marketable skill. In view of

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<sup>1</sup> Nichols, Frederick G., Commercial Education in the High School, D. Appleton-Century Company. New York, 1933, pp. 220-221.

the increasing specialization in present-day businesses, it seems likely that the acquiring of technical skills will continue to occupy an important place in business education programs.

In relatively recent years, more and more attention has been given to the general education aspects of business training programs. Ample evidence may be found in the frequent use of such terms as economic understandings, social understandings, personal use, business ethics, consumer economics, and so on. Further evidence may be found in the increasing number of social-business subjects that are being introduced into business education curriculums. Examples are: General Business, Economic Geography, Business Law, Economics, Consumer Economics, and Personal-Use Typewriting. This general education objective has grown out of the recognition that business performs a social service of great importance. Every businessman has certain responsibilities to the public and to the employee. The consumer and the business worker in turn have definite responsibilities to the businessman. All have responsibilities to the social order of which they are a part. Therefore, one of the purposes of business education is to provide the student with the social and economic intelligence that will enable him to discharge adequately his responsibility as a citizen. Certainly, widespread economic and social understandings are necessary if each individual is to reap the maximum benefit from a free society.

There seems to be little value in placing a graduate in a job if he cannot stay placed. In most cases it is practically impossible to

separate the general education acquired in the business education department from that gained in other departments of the school. Therefore, we should not solely evaluate the business education program by the number of graduates placed or by its general education values; but, we should take into careful consideration the success or failure of the individual graduate after he has secured the beginning job. How long did the graduate remain with one employer? How well did he adjust to the job assigned to him? Did he work well with other employees on his own level? Did he understand and appreciate the point of view of his supervisor? Was he happy at his job? Did he advance within the organization? Was his employer pleased with his accomplishments on the job? If we expect the answers to such questions to be favorable, the business education department must develop in each student a certain amount of occupational intelligence.

First of all, the student needs some understanding of the opportunities and requirements for occupational success. He should understand that the initial-contact job will likely be on the lowest of any number of occupational levels within the business office, the relationship of the office to the total business organization, his relationship to his fellow workers and to office management, the lines of promotion likely to be open to him, and the requirements for promotion. Furthermore, he should recognize the importance of his position in relation to all others in the office and that it is his duty to render the greatest possible service in return for the pay he receives. These understandings are

necessary for proper job performance on the lower levels as well as for advancement to higher levels. The office worker who advances must somehow acquire these important understandings. Because they will determine whether or not he will be happy at his job, the limited-ability office worker should acquire many of the same understandings.

If the business education department seeks to render maximum service to its students and their prospective employers, it must provide for the development of occupational intelligence. To do so, there must be an understanding by both the teacher and the students of the functions of the office and its overall operational procedures. The proper perspective comes from a view of the whole office, operating as a unit and for a purpose. It was to meet this need for a total view of modern office operation that this study was conducted.

#### Purposes of the Study

The three primary objectives of this study may be stated as follows:

1. To determine current procedures and practices in the large modern office.
2. To determine the primary reasons why office managers give attention to these practices and procedures.
3. To develop recommendations showing what business education teachers can do to help students acquire the occupational intelligence that they need.

The first concern of this study was to identify the general procedures.



and practices to which the present-day office manager devotes his attention. Some of the questions to be answered were: What are the main areas of emphasis in current office practices and procedures? What does each major area include? What are some specific examples in each area?

The second purpose was to determine the reasons for the current emphasis in office work being what they are. These reasons are of primary importance to the prospective office worker in his effort to understand and appreciate his obligation to his employer. Herein, also, lies his hope for success and advancement on the job.

The final purpose was to develop some concrete suggestions which the business education teacher might use in his effort to prepare his students for a satisfying occupational life, and in his equally important task of supplying the businessman with competent office workers.

#### Scope of the Study

Although the preliminary findings of this study were obtained from general literature in the field, the jury by which the original findings were checked was limited to members of the Richmond, Virginia, Chapter of the National Office Management Association. The jury was selected from members of the National Office Management Association because these men are specialists in office management and the recognized leaders in the field. It was felt, therefore, that they are especially well qualified to supply information about current problems of office operation.

The jury was further limited to managers of offices employing fifty

or more workers. As the size of the office force increases, business management becomes more and more concerned about efficiency of operation. Thus, the large offices tend to set the pace in developing the best possible office procedures and practices. Admittedly, many office workers are going to be employed by smaller organizations, but many of the same principles apply to an office of any size. The worker who has a grasp of the many possibilities and applies as many as he can to his own job will likely be the one who advances most rapidly.

The sixteen members of the jury represented organizations employing from fifty to over six hundred office workers. Included were the following types of business: tobacco, processing, wholesaling, food manufacturing, oil distributing, railway transportation, highway transportation, metals manufacturing, department store, banking, insurance, consumer cooperative, retail food distributing, and telephone communication.

## CHAPTER II

### PROCEDURES FOR COLLECTING THE DATA

#### Identification of Current Practices and Procedures

The first problem of this study was to identify current office practices and procedures as they are viewed by the office manager. To accomplish that purpose a review was made of literature in the office management field. The material gathered from the literature was recorded on index cards and later sorted and summarized according to the following outline.

- I. RELATIONSHIP OF THE OFFICE TO BUSINESS MANAGEMENT
  - A. Operating Services
  - B. Control Services
- II. FUNDAMENTAL ELEMENTS IN OFFICE WORK
- III. PRESSURES ON THE MODERN OFFICE
  - A. Demand for More Information
  - B. Demand for More Speed
  - C. Demand for Cost Reduction
  - D. Demand for Employee Welfare
- IV. AREAS OF EMPHASIS IN OFFICE MANAGEMENT
  - A. Mechanization
  - B. Standardization
  - C. Simplification
  - D. Centralization

E. Routinization

F. Scheduling

G. Humanization

Although this study is primarily concerned with Item IV in the outline, a complete treatment of the material is presented in the following chapter.

#### Formulation of the Hypotheses

From the initial identification of current practices and procedures, certain hypotheses were formulated with respect to the major areas of emphasis. A total of seventeen such hypotheses were formulated and are presented in the following chapter.

#### Procedure for Testing the Hypotheses

In order to test the accuracy of the hypotheses, personal interviews were conducted with a number of selected office managers who served as a jury for that purpose. As described in Chapter I, the jury was selected from among the members of the National Office Management Association in Richmond, Virginia.

#### Preparation of the Interview Guide

A list of questions was prepared and used as an interview guide to test the hypotheses during the personal interviews. After the guide was used in three interviews to test its completeness and usefulness, it was

revised and duplicated for use in the remaining interviews. The questions in the guide were grouped according to the major areas of emphasis mentioned previously. The guide was designed so that the responses of the members of the jury could be recorded directly on them during the interviews by the interviewer. Two sample copies of the completed interview guide may be found in Appendix B.

### Selection of the Jury

The first step in selecting the jury was to visit the president of the Richmond Chapter of the National Office Management Association so as to (a) obtain his permission to conduct the interviews and (b) secure from him a list of the firms which are members of the Association. Then, letters were sent to the companies requesting information about the number of office workers employed by each. (A copy of the letter may be found in Appendix A.) Office managers in the firms reporting fifty or more office workers were selected to serve on the jury. The total number of firms represented was sixteen.

### Conducting the Interviews

Prior to the time at which each interview was conducted, a second letter was sent to the office manager, requesting permission to visit and talk with him. (A sample copy of the letter may be found in Appendix B.) The first step in the interview procedure was to explain briefly the nature and purpose of the study. The discussion then proceeded approximately

in the order of the questions outlined on the interview guide. The response of each office manager to each question was recorded directly on a separate guide. The time required for each interview ranged from one and one-half hours to three hours.

#### Summarization of the Data

To aid in summarizing the data, a tally sheet was prepared for each question in the interview guide. The guides were carefully examined and the information relating to each question was recorded on the appropriate tally sheet. Each of the tally sheets was then re-examined, similar information grouped, and totals drawn. The information thus recorded was used to construct the tables and prepare the text material presented in Chapter IV.

## CHAPTER III

### PROBLEMS IN THE MODERN OFFICE

#### Relationship of the Office to Business Management

The function of business is to produce and distribute the goods and services which satisfy a multitude of human wants. The force that motivates business activities is the profit expected in return for the service rendered. If no profit is realized by a business, it soon ceases to exist. Therefore, anything that directly affects the production or sale of goods and services becomes a matter of immediate concern to business management. There is a constant search for ways to reduce the cost of goods or services to be sold, and an equally important effort to increase the volume of sales. These are problems of vital importance to the success of any business.

Management has generally looked upon the office as an unavoidable nuisance because it produces nothing that can be sold, and it does not contribute directly to the sale of goods or services already produced. It

... was once considered as nothing more than the focal point of internal and external communication, capable only of dispatching a few letters upon occasion and of preparing records of no practical value.<sup>2</sup>

As long as such a concept prevailed there was little initiative in the office and, more frequently than not, the lot of the office worker was an unhappy one. How could it be otherwise as long as management placed

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<sup>2</sup> Maze, Coleman L., Office Management, The Ronald Press Company. New York, 1947, p. 7.

such a low value on the product of the office?

In recent years, however, management has materially altered its attitude toward the office and its functions. The present tendency is to view the office as a vital, service-rendering unit of great importance. It has become a full partner in the profit-making efforts of business. Management has begun to realize that accurate, timely, inclusive, and dependable records are important factors in the operation and control of a business. Without the information and guidance provided by records, factory wheels do not turn and the sale of goods and services cannot take place. Maze<sup>3</sup> has grouped the various office functions into (1) operating services, and (2) control services.

Operating Services. The operating services performed by the office include supplementary aids such as reception, information, filing, typing, telephone, billing, computing, messenger service, and so on. Also included may be the purchase of materials, equipment and supplies, as well as the selection, training, and well-being of personnel. Sometimes the office may be charged with the maintenance of buildings and grounds; the safeguarding of property; and the layout of offices and factories. More recently, research and library duties have been added to the list. These are some of the functions which the office performs in the every-day operation of a business.

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<sup>3</sup> Op. cit., p. 6.



Control Services. As the complexity of business operations increases the exercise of proper control by responsible company officials becomes more difficult. Management has come to realize that the control must be based upon records and statistical analysis. Much of this work is called "accounting," and includes general accounting, sales analysis, cost analysis, credits, collections, and the like. Other elements of control such as planning, scheduling, methods analysis, and measured production require the services of the office. Thus, the office is able to facilitate and speed up the work of the entire business enterprise. Through it, production costs may be controlled and sales efforts may be given the best possible direction.

#### Fundamental Elements in Office Work

Herrmann<sup>4</sup> divides basic office work into seven fundamental elements.

They are:

1. Record forms
2. Reports and communications
3. Filing
4. Equipment, machines, and special devices
5. Space
6. Personnel
7. Procedures

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<sup>4</sup> Herrmann, Irvin A., Office Methods, Systems, and Procedures, The Ronald Press Company, New York, 1950, pp. 7-8.

Each of these elements has become a matter of vital concern to the modern office manager. Each is so closely related to all the others that a change in any one may necessitate changes in one or more of the others. Constant attention must be given to keeping these elements in close harmony if the office is to adequately perform its functions.

### Pressures on the Modern Office

Demand for More Information. The growth of business has been marked by the development of many single proprietorships into large corporations, the evolution of the subsidiary, the branch, and the constantly broadening markets. Consequently, there has resulted business operation by remote control. Large organizations can operate successfully only so long as office records provide executives with the facts upon which to base their judgments. Simultaneously, increasing governmental regulations and complex tax methods have required new forms of record keeping by every business, large and small. Competition has increased the importance of sales and credit statistics. Production data, inventory controls, incentives, profit-sharing, pensions, group insurance, credit unions, labor unions, savings programs, training programs, and many other developments have added to the office burden. All of such factors have increased, to a staggering total, the number and types of records required by management. The end is not yet in sight.

Demand for More Speed. With the demand for more information by management, has come the inevitable pressure for greater speed in

producing innumerable records and reports. To be of value to management, the information must be up-to-date; so, to the office force falls the burden of supplying it rapidly. Even though the number of records and reports required is increasing, the number of work hours in the business day remain the same. Therefore, the only solution is to produce each record or report at a more rapid rate.

Demand for Cost Reduction. The increased pressure for more information has forced businesses to improve their office systems, practices, and procedures, all of which cost a considerable amount of money. The growing proportion of office workers to the total number of employees has added further to the cost of the services rendered by the office. Cost reduction, therefore, has become a problem of primary concern to the office manager. This is the same problem which the factory manager has faced for a considerably longer period of time; and it seems inevitable that factory production methods must be adapted to office operation.

Demand for Employee Welfare. The unusually high level of employment which has prevailed in recent years has been a contributing factor to another problem now facing the office manager—employee turnover. When plenty of jobs are available, employee turnover in any one organization is likely to be high. The result, of course, is reduced efficiency coupled with added costs of training new employees at frequent intervals. In an effort to combat the high rate of turnover, businesses have turned their attention toward making the worker happy at his job

with the hope that he will remain with the organization. The increased benefits granted to factory employees since the rise of labor unions has had an influence in the same direction. And not to be overlooked, is the concern for the welfare of their employees that many enlightened employers have developed independently of external pressures. The net result has been an increased demand for consideration of the office worker as an individual whose welfare is important to the business organization.

#### Areas of Emphasis in Office Management

Mechanization. One of the primary problems facing the office manager today is that of finding a way to provide top management with more information, at greater speeds, without increasing the cost to a prohibitive degree. Taking a cue from the mass production methods of the factory, he has turned his attention to new machines and mechanical devices. This mechanization seems to be reaching almost every phase of office operation, from a simple task such as opening letters to extremely complex accounting procedures. Office management literature is filled with examples of mechanical devices now used in the office. A few examples of some of the more complex devices are given here:

1. A MultiMatic Accounting Board is now being used for accounting and payroll preparation. It simultaneously posts a number of items in a single writing. It permits the same entry to appear in a number of columns on separate reports. Entries are triple checked by number

matching, color matching, and position matching.<sup>5</sup>

2. A payroll machine is being used which prints five original payroll records with one operation--check register, payroll journal, pay statement, pay check, or pay envelope, and individual employee's earning record. Five balances are mechanically computed and printed on each employee's pay statement.<sup>6</sup>

3. Tabulating punch cards or key-sort devices are being used to prepare payrolls. Included in the work of these machines may be the mechanical sorting of piece-work job tickets and the printing of normal salary, normal deductions, and normal net payment on the payroll sheet.<sup>7</sup>

4. Microfilm machines which photograph both sides of a form at the same time are being used to provide permanent records which can be stored in a minimum of space.<sup>8</sup>

5. A new card file makes easy the mechanical handling of large quantities of records. It can handle 32,320 five by three inch records in the same space as that occupied by a standard office desk. The operator simply touches a button to motivate the unit and review records

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<sup>5</sup> Sherwood, George H., "Office Methods and Operation," The Journal of Accountancy, American Institute Publishing Company, Inc. Easton, Pennsylvania, February, 1946, Vol. 81, No. 2, p. 154.

<sup>6</sup> Ibid.

<sup>7</sup> Maze, op. cit., pp. 656-658.

<sup>8</sup> Sherwood, op. cit., p. 154.

for instant reference or posting. It can handle records of varying sizes and is well suited for large concentrations of records where fast and frequent reference is required. Its mobility and electrical operation eliminates walking, stooping, and pulling.<sup>9</sup>

The following hypotheses were set up with respect to office mechanization:

- I. The use of office machines is being increased.
- II. More machines and mechanical devices are being used in order to reduce the cost of office operation, increase the speed of operations, increase the accuracy of records, reduce the number of office workers required, and relieve the office worker of some of the burden of repetitive routines.

Standardization. As another step in the office manager's efforts to improve efficiency, he is turning to standardization in two broad areas--procedures and materials.

Standardization of materials may include:

1. Items of equipment such as desks, tables, chairs, floor coverings, bookcases, equipment for mail sorting and handling, and so on.<sup>10</sup>
2. Files with uniformity of depth, width, and height to permit interchangeability.<sup>11</sup>

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<sup>9</sup> "New Products," The Journal of Accountancy, American Institute Publishing Company, Inc. Easton, Pennsylvania, May, 1952, Vol. 93, No. 5, p. 617.

<sup>10</sup> Office Standards, op. cit., p. 7.

<sup>11</sup> Maze, op. cit., p. 460.

3. Machines such as typewriters, calculators, duplicating machines, dictating machines, coin sorters and wrappers, postage metering devices, addressing machines, and punched card devices.<sup>12</sup>

4. Items of office supplies which are consumed in the ordinary operation of the business.<sup>13</sup>

5. Printed forms with standard paper sizes, spacing, and arrangement of information.<sup>14</sup>

Some of the standard procedures noted are:

1. Employment procedures which include standard methods of application, interviewing, medical examinations, salary and rate determination, classification by occupation, and entry on the payroll.<sup>15</sup>

2. Billing, vouchering, and accounting procedures which produce standard operating statistics in order to eliminate "weighting" or "rationalization" which are subject to errors of human judgment.<sup>16</sup>

3. Standard job-performance procedures for filing, sorting and handling mail, typing, producing multiple copies by various duplicating

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<sup>12</sup> Office Standards, op. cit.

<sup>13</sup> Ibid.

<sup>14</sup> Meyers, Richard J., "A Plan for Forms Control," NOMA Forum, National Office Management Association. Philadelphia, Pennsylvania, December, 1947, Vol. XXII, No. 12, p. 17.

<sup>15</sup> National Office Management Association, Office Standards, National Office Management Association. Philadelphia, Pennsylvania, April, 1946, Bulletin No. 2.

<sup>16</sup> Ibid.

processes, posting, and the like.<sup>17</sup>

4. Standard work output requirements in a wide variety of jobs.<sup>18</sup>

The hypotheses established with respect to standardization in the office follow:

III. Office materials are being standardized.

IV. Standardization of materials is taking place in order to reduce the cost of materials through volume purchases, obtain better maintenance service, and simplify recording activities.

V. Office procedures are being standardized.

VI. Standardization of procedures is taking place in order to improve the efficiency of job performance, reduce costs, and increase production.

Simplification. In an attempt to get maximum output with the least possible effort, the office manager is devoting a great deal of thought and attention to simplifying office operations. The problem has been stated by one author as "... the application of common sense to work problems in order to find easier and better ways of doing work."<sup>19</sup> Simplification is applicable to any routine involving forms, machines,

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<sup>17</sup> Stapleton, C. U., "Standards Can Save You Money," NOMA Forum, National Office Management Association. Philadelphia, Pennsylvania, March, 1947, Vol. XXII, No. 3, p. 26.

<sup>18</sup> Ibid.

<sup>19</sup> DeLancey, Opal H., "Applying Work Simplification to Transcription," UBEA Forum. Washington, D. C., January, 1951, Vol. V, No. 4, p. 18.



appliances, layout, materials, or methods. It involves the questions: why, what, where, when, who, and how? Some examples of what is being done in this field include:

1. Materials, machines, and devices are being placed within the normal working area of the people who use them.<sup>20</sup>
2. Ready accessibility of records in files close to the worker saves much waste of time and effort.<sup>21</sup>
3. Work is being organized to flow in a straight line through the office in a manner similar to the factory assembly line.<sup>22</sup>
4. Devices such as manifolding, duplicating, photographic processes, and punched-card tabulating are being used to eliminate unnecessary copying when the same thing is written more than once.<sup>23</sup>
5. Attention is being given to recording at the first writing all the information needed on a particular form. This procedure avoids recopying, rebalancing, posting errors, and loss of time.<sup>24</sup>
6. Work is being divided into small enough units so that errors can

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<sup>20</sup> Herrmann, op. cit., p. 104.

<sup>21</sup> Herrmann, op. cit., p. 130.

<sup>22</sup> Ibid.

<sup>23</sup> Op. cit., p. 178.

<sup>24</sup> Bows, A. J., "Take a New Look at Your Methods," NOMA Forum, National Office Management Association. Philadelphia, Pennsylvania, January, 1951, Vol. XXVI, No. 1, p. 27.

be localized readily.<sup>25</sup>

7. Attempts are being made to reduce the time spent at peak-load periods by shifting some of the work to slack periods.<sup>26</sup>

8. The individual worker is being educated to simplify his duties as a part of his normal routine.<sup>27</sup>

9. Attention is being given to rearranging the sequence of operations in order to avoid rehandling of materials.<sup>28</sup>

10. Layout charts or similar devices are being used to control the use of office space which is one of the heaviest office expenses.<sup>29</sup>

11. The flow of work through the office is checked regularly to see if it can be improved.<sup>30</sup>

12. Some businesses are making studies to determine to what extent an office machine and its operator are giving maximum output. Man and machine charts may be used to record the results of the studies.<sup>31</sup>

<sup>25</sup> Ibid.

<sup>26</sup> Ibid.

<sup>27</sup> Fish, Edward R., Jr., "Office Work Simplification," NOMA Forum, National Office Management Association. Philadelphia, Pennsylvania, February, 1949, Vol. XXIV, No. 2, p. 30.

<sup>28</sup> Dent, C. H., "The Planned Approach to Lower Office Costs," NOMA Forum, National Office Management Association. Philadelphia, Pennsylvania, October, 1949, Vol. XXIV, No. 10, p. 15.

<sup>29</sup> Maze, op. cit., p. 534.

<sup>30</sup> Ludlow, R. C., "A Work Simplification Program for the Office," NOMA Forum, National Office Management Association. Philadelphia, Pennsylvania, February, 1949, Vol. XXIV, No. 2, p. 35.

<sup>31</sup> Ibid.

13. Forms are being constantly reviewed in an effort to improve the arrangement of information or to eliminate unnecessary information.<sup>32</sup>

14. Attention is being given to the pre-positioning of materials to eliminate long reaches, hunting materials and tools, and carrying materials too far.<sup>33</sup>

15. Correct use of machines with an understanding of the basic features, devices, and care is being stressed in order to eliminate use-less effort.<sup>34</sup>

16. Efforts to simplify correspondence include making use of the NOMA simplified letter, eliminating wordiness and meaningless formalities, and using voice discs for inter-company correspondence.<sup>35</sup>

17. In some cases attempts are being made to match jobs to individuals rather than trying to match individuals to the jobs.<sup>36</sup>

The hypotheses established with respect to simplification are:

VII. Attempts are being made to simplify office materials, methods or procedures by which each job or task is accomplished, and the motions of the individual worker at each task.

VIII. The chief objectives of simplification efforts are to reduce

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<sup>32</sup> Nissley, Harold R., "Clues to Clerical Cost Cutting," NOMA Forum, National Office Management Association. Philadelphia, Pennsylvania, December, 1950, Vol. XXV, No. 12, p. 25.

<sup>33</sup> Fish, op. cit., p. 31.

<sup>34</sup> Herrmann, op. cit., p. 57.

<sup>35</sup> Ludlow, op. cit., p. 37.

<sup>36</sup> Nissley, op. cit., p. 25.

direct labor costs, increase effectiveness of records, improve customer services, improve working conditions, and develop executive or planning ability.

IX. Supervisors on the various levels are the key people in the majority of simplification programs.

Centralization. Control of office activities requires centralization of responsibility for the work to be done. The extent of centralization is usually determined by the increase in efficiency and cost reduction that it brings about. Some areas in which centralization has been found desirable are illustrated:

1. One person is being made responsible for the planning of all office work.<sup>37</sup>
2. Central files are being used as much as possible for the storage of permanent records. One person may have complete charge of these central files.<sup>38</sup>
3. Control over the designing and printing of all forms is being centralized.<sup>39</sup>
4. The storage and issuance of all office supplies is being placed

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<sup>37</sup> Maze, op. cit., p. 677.

<sup>38</sup> Sherwood, George H., "Office Methods and Operation," The Journal of Accountancy, American Institute Publishing Company, Inc. Easton, Pennsylvania, November, 1946, Vol. 82, No. 5, p. 429.

<sup>39</sup> Ludlow, op. cit., p. 37.

under centralized control.<sup>40</sup>

5. The issuance of checks and the authority for their distribution to the books is being centralized.<sup>41</sup>

6. One person is responsible for all purchase orders.<sup>42</sup>

7. Mail is being sent from various departments to a central mailing department so that all correspondence to the same addressee can be combined in the same envelope.<sup>43</sup>

8. Centralized preparation of duplicating masters or stencils reduces the number of wide-carriage typewriters needed.<sup>44</sup>

9. Operators and machines are grouped into centralized production units for more flexibility and better control. Some common centralized groups are reproduction, calculating, transcribing, and statement writing units.<sup>45</sup>

10. Some companies with branch offices have a central accounting office with the facts and figures coming into that office by mail

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<sup>40</sup> Maze, op. cit., p. 489.

<sup>41</sup> Sherwood, op. cit., p. 422.

<sup>42</sup> Maze, op. cit., p. 661.

<sup>43</sup> Herrmann, op. cit., p. 449.

<sup>44</sup> Herrmann, op. cit., p. 263.

<sup>45</sup> Sexton, William E., "Office Machine Factors in Cost Reduction," NOMA Forum, National Office Management Association. Philadelphia, Pennsylvania, October, 1950, Vol. XXV, No. 10, p. 22.

periodically.<sup>46</sup>

The following hypotheses were established with respect to centralization in the office:

- X. Centralized control of office operations is being established.
- XI. The primary reasons for centralization are to establish responsibility for completing work, reduce costs, and increase operating efficiency.

Routinization. Much of the work in an office can be broken down into one-step routines which can be automatized by a worker so that he achieves a high degree of speed and accuracy in completing the work. Here again, the office manager seems to be adapting the basic principles of the factory assembly line to office operation. Each worker contributes to the total production by performing one operation in a series of many.

Common examples of routinization include:

1. In large offices the bookkeeper seldom works with the entire cycle. Some work with sales tickets, some type invoices, others write checks, and others operate IBM equipment as it computes summaries.<sup>47</sup>
2. Some office workers devote their entire time to routine filing activities, some to typing information on ruled forms, others to making

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<sup>46</sup> Deane, William V., "How Westinghouse Organizes Accounting Functions," The Journal of Accountancy, American Institute Publishing Company, Inc. Easton, Pennsylvania, March, 1951, Vol. 91, No. 3, p. 403.

<sup>47</sup> Harms, Harm, Methods in Vocational Business Education, South-Western Publishing Company. New York, 1949, p. 202.

routines calculations on a machine, and still others to the operation of duplicating machines.<sup>48</sup>

The following hypotheses were set up with respect to routinization of office work:

- XII. Office work is frequently divided into one-step routines with separate individuals concentrating on the different operations. Therefore, office managers are interested in having some workers who are trained to do well only one of these routines.
- XIII. The primary reason for dividing work into simple routines is to improve the efficiency of performance at each task, thus increasing speed and reducing costs.

Scheduling. Scheduling is essentially the application of the time factor to the movement of work through the office. Successful scheduling helps to eliminate both bottlenecks and wasted time. The preparation of and the assignment of responsibility for periodic schedules provide for smooth flow of work through the office. Examples of what is being done follow:

1. Specific times to be allowed for various operations may be determined by time studies or by estimates of supervisors.<sup>49</sup>
2. Work is broken into units following natural divisions so that specific times may be allowed for the completion of each unit. For example, in calculating the gross pay for a large number of factory workers the calculations might be one unit while the checking would be

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<sup>48</sup> Maze, op. cit., p. 389.

<sup>49</sup> Maze, op. cit., p. 687.

another.<sup>50</sup>

3. Work flow charts, organization charts, or similar devices are used to route the flow of work through the office.<sup>51</sup>

The hypotheses established with respect to scheduling follow:

XIV. Attention is being given to conducting office work according to a schedule prepared in advance.

XV. The primary objectives of scheduling are to aid the smooth flow of work and eliminate wasted time.

Humanization. Ample evidence of genuine concern for the welfare of the individual office worker may be found in office management literature. Employers are recognizing that office workers need recognition and the dignity that comes with knowing that their jobs are important. All office workers have a common desire to be important and to be recognized as individuals. All want security and working conditions comparable to those of the skilled factory worker. It is generally agreed that a happy employee is the most valuable one. Examples of what is being done to humanize office work follow:

1. Office workers are being furnished with information about the total operation of the business in which they work. Many office managers realize that the best antidote for dissatisfaction is to give information

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<sup>50</sup> Maze, op. cit., p. 686.

<sup>51</sup> Wiltse, John S., "Scheduling work," NOMA Forum, National Office Management Association, Philadelphia, Pennsylvania, November, 1946, Vol. XXI, No. 11, p. 4.



and allow office employees to raise questions and discuss their problems freely.<sup>52</sup>

2. Attempts are being made to show each worker the importance of his job to the business organization.<sup>53</sup>

3. Employee benefits such as pension plans, accident and health insurance, salary administration plans, and the like are being maintained for the benefit of office workers.<sup>54</sup>

4. Promotion plans are being established to provide for growth within the organization.<sup>55</sup>

5. Employee suggestion systems are being established.<sup>56</sup>

6. Monetary inducements such as prizes and awards are being offered by some organizations to individuals for outstanding accomplishment.<sup>57</sup>

<sup>52</sup> Wylie, Harry L., "Why do Office Employees Join Unions," NOMA Forum, National Office Management Association. Philadelphia, Pennsylvania, November, 1949, Vol. XXIV, No. 11, p. 25.

<sup>53</sup> Staehle, Jack C., "The \$1,000,000 Ability: Handling People," NOMA Forum, National Office Management Association. Philadelphia, Pennsylvania, December, 1949, Vol. XXIV, No. 12, p. 6.

<sup>54</sup> Place, E. Eugene, "Incentives Are Inspirational," NOMA Forum, National Office Management Association. Philadelphia, Pennsylvania, October, 1949, Vol. XXIV, No. 10, p. 12.

<sup>55</sup> Ibid.

<sup>56</sup> Bowes, Fredrick, Jr., "Office Workers--The New Middle Class," NOMA Forum, National Office Management Association, Philadelphia, Pennsylvania, March, 1950, Vol. XXV, No. 3, p. 7.

<sup>57</sup> Place, op. cit., p. 12.

7. Rest periods, either formal or informal, are being provided for office workers.<sup>58</sup>

Following are the hypotheses formulated with respect to humanization in the office.

- XVI. Efforts are being made to provide for the welfare of the office worker at his job.
- XVII. The primary objectives of humanization efforts are to increase output, decrease waste, improve the quality of work, reduce absenteeism, and reduce employee turnover.

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<sup>58</sup> Ibid.

## CHAPTER IV

### ANALYSIS OF THE DATA

#### Introduction

The data collected through personal interviews with members of the jury were summarized according to the seven major areas of emphasis developed in Chapter III, which were mechanization, standardization, simplification, centralization, routinization, scheduling, and humanization.

The jury was composed of sixteen office managers who are (a) members of the Richmond, Virginia, Chapter of the National Office Management Association and (b) supervisors of fifty or more office employees. For this study the research worker assumes the interviewees to be representative managers of large present-day offices which are members of the National Office Management Association. Therefore, even though a small number of men were interviewed, the responses are reported in per cents.

#### Mechanization

The responses of office managers to questions concerning mechanization in the modern office were analyzed as follows:

Increased Use of Machines. All interviewees stated that more machines are being added to the office. Many said that their offices have been highly mechanized for a number of years; but they are constantly adding new types of machines, increasing the number already in use, and replacing old models with new ones. Nineteen per cent of the

group also stated that they have office machine needs which are not met at the present time. Six per cent need a sales analysis machine which will produce cumulative totals much faster than anything on the market today, a billing machine and calculating equipment to fit specialized jobs, and an invoice-control machine which is not now available. Six per cent said that they could not get delivery rapidly enough on the well-established machines.

The types of machines which have received most recent attention are presented in Table 1. Examination of the table indicates that punched-card tabulating machines represent the most significant element of recent mechanization developments. Seventy-five per cent of the interviewees mentioned a decided increase in this type of equipment. Also high on the list is the electric typewriter which was named by 56 per cent of the jury. Bookkeeping and accounting machines of various types were mentioned, but less frequently. Automatic calculators and several types of duplicating equipment, although not essentially new developments, are being increased in number. Off-set printing, the Ozalid process, and the Bruning process are examples of duplicators mentioned. Although microfilming machines have been installed by less than 25 per cent of the businesses visited, many who are not now using them indicated that such equipment would be added in the near future.

Objectives of Mechanization. According to the information presented in Table 2, the most frequently mentioned reason for the introduction of more office machines is to increase the speed of operations. Seventy-five

TABLE 1

The Number of Office Managers, Among Sixteen Interviewed,  
Who Stated that the Use of the Following Types of  
Office Machines is Being Increased

Type of Machine	Number <sup>a</sup>
Punched-card tabulating equipment	12
Electric typewriters	9
Bookkeeping or accounting machines	7
Automatic calculators	3
Microfilming equipment	3
Duplicating equipment	3

<sup>a</sup> Although only sixteen office managers were interviewed, the total number of responses in this table is thirty-seven. The reason is that most of the interviewees stated that use of more than one type of machine is being increased.

TABLE 2

The Number of Office Managers, Among Sixteen Interviewed,  
Who Gave the Following Reasons for the Introduction  
of More Machines into the Office

Reason	Number <sup>a</sup>
To increase speed	12
To reduce costs	8
To increase accuracy	4
To increase efficiency	4
To reduce the number of employees	4
To simplify work	2
To reduce employee fatigue	1
To reduce office space	1

<sup>a</sup> Although only sixteen office managers were interviewed, the total number of responses in this table is thirty-six. The reason is that most of the interviewees gave more than one reason for the introduction of more office machines.

per cent of the office managers revealed their concern for the speed factor. Fifty per cent of the jury stressed the importance of the contribution of machines to the reduction of office operating costs. Twenty-five per cent of the men also voiced concern for increased accuracy, reduction in the number of employees, and increased efficiency. Although the term efficiency was used many times by the interviewees throughout the study, it apparently is an ambiguous expression; so little significance can be attached to it. It is also interesting to note that at least 6 per cent considered work simplification, reduction of employee fatigue, and reduction of space requirements sufficient cause for using more machines. Six per cent also said that a shortage of employees is forcing mechanization.

Confirmation of Hypotheses I and II. The above analysis reveals that Hypothesis I, which was developed in Chapter III, was confirmed by every member of the jury. Only one element of Hypothesis II failed to receive support from at least 25 per cent of the jury. While no office manager stated directly that office machines are used to relieve the office worker of some of the burden of repetitive routines, 6 per cent of them thought that the reduction of employee fatigue is important. Three new reasons were brought out--to reduce office space requirements, to simplify work, and to increase efficiency.

#### Standardization

The data on standardization were treated in two major parts--

materials and procedures. A summary of the office managers' opinions on the standardization of materials is presented in Table 3, and the reasons they gave are summarized in Table 4. Tables 5 and 6 present the views of the jury on the standardization of procedures.

Materials Being Standardized. By examining Table 3, it can be seen that every member of the jury agreed that office supply items are being made standard. Only 12 per cent of the interviewees indicated that little or nothing is being done to standardize paper sizes and spacing for forms and the arrangement of information on forms. Nineteen per cent of the men stated that no standard equipment is used. Twelve per cent said that a wide variety of job requirements makes it impractical to standardize on a particular type of equipment, and 6 per cent said that the choice of equipment is left to the department heads or the individual worker who will use it. To the latter, it is more important to have a machine that the employee wants than to have all machines alike.

The number of office managers reporting standardization of various items of equipment were:

<u>Item</u>	<u>Number</u>
Furniture	11
Typewriters	9
Files	6
Bookkeeping machines	4
Calculators	3
Adding machines	2
Transcribing machines	1



TABLE 3

The Number of Office Managers, Among Sixteen Interviewed,  
Who Stated that the Following Materials  
Are Being Standardized

Item	Number
Supplies	16
Arrangement of information on forms <sup>a</sup>	14
Paper sizes and spacing for forms <sup>a</sup>	14
Equipment	13

<sup>a</sup> Although forms are supply items, they are treated separately here because of their special importance in office recording activities.

In almost every case, steel furniture is becoming the standard. The same is true of files, but they are also being made uniform in size to permit interchangeability. As previously indicated, the electric typewriter is replacing the manual machine in many offices.

Objectives of Materials Standardization. As shown in Table 4, the primary reason for standardizing paper sizes, spacing, and the arrangement of information on forms is to simplify the recording of information on records and reports. All office managers who reported standardization of these items indicated the same objective.

According to 75 per cent of the jury, the economy afforded by volume purchases is a good argument for standardizing materials. Another important factor is the improved maintenance service offered to quantity users of a particular type of equipment. Twenty-five per cent of the interviewees are also interested in improving office appearance and providing for ready transfer of workers from one job to another. Only 6 per cent stated that the saving of space is an important objective, but this factor may be hidden in some of the other objectives.

Procedures Being Standardized. Reference to Table 5 indicates that employment procedures and accounting procedures which produce standard operating statistics are being made standard in all of the offices visited. Standard employment procedures mentioned include application blanks, interviews, tests, physical examinations, checking references, assignment to jobs, and initial salary increases.

Standard job-performance procedures are required in some degree by

TABLE 4

The Number of Office Managers, Among Sixteen Interviewed,  
Who Gave the Following Reasons for Standardizing  
Office Materials

Reason	Number <sup>a</sup>
To simplify recording of information <sup>b</sup>	14
To increase purchasing economy	12
To obtain better maintenance service	7
To improve office appearance	4
To permit ready transfer of workers between jobs	4
To save space	1

<sup>a</sup> Although only sixteen office managers were interviewed, the total number of responses in this table is forty-two. The reason is that most of the interviewees gave more than one reason for the standardization of office materials.

<sup>b</sup> This item applies particularly to paper sizes, spacing, and the arrangement of information on forms.

TABLE 5

The Number of Office Managers, Among Sixteen Interviewed,  
Who Stated that the Following Procedures  
Are Being Standardized

Procedure	Number
Employment procedures	16
Procedures for producing standard statistics	16
Job-performance procedures	15
Work output <sup>a</sup>	11

<sup>a</sup> Work output may not be properly called a procedure, but it results directly therefrom.

all but 6 per cent of the men interviewed. The latter feel that it is more important to please the worker by allowing him to do a job in his own way. Twelve per cent of those who indicated that standards are maintained, qualified their statements with such expressions as generally or reasonably so. Six per cent said that such standards apply particularly to payroll and billing procedures, and 6 per cent said that such matters are controlled by union rules.

Sixty-nine per cent of the interviewees reported that office employees are generally expected to meet definite output requirements. Fifty per cent of the managers agreed, however, that they experience some difficulty in measuring the output in many jobs. Output is determined on a monthly basis in 6 per cent of the offices. Lack of routine work and recognition of the varying capacities of individuals were reasons given by those who do not require a standard work output.

Objectives of Procedures Standardization. Table 6 shows that cost reduction is the objective of procedure standardization most frequently mentioned by the jury. Following closely in order were increased efficiency, work simplification, and increased production. Some office managers are also concerned with providing for easy transfer of workers from one job to another, simplifying employee training programs, and providing for better control of office operations.

Confirmation of Hypotheses III, IV, V, and VI. The preceding discussion indicates that Hypotheses III and V were confirmed by every member of the jury. Every element of Hypothesis IV received support from

TABLE 6  
 The Number of Office Managers, Among Sixteen Interviewed,  
 Who Gave the Following Reasons for Standardizing  
 Office Procedures

Reason	Number <sup>a</sup>
To reduce costs	8
To improve efficiency	7
To simplify work	5
To increase production	5
To permit ready transfer of workers between jobs	2
To simplify employee training programs	2
To provide for better control	1

<sup>a</sup> Although only sixteen office managers were interviewed, the total number of responses in this table is thirty. The reason is that most of the interviewees gave more than one reason for the standardization of office procedures.

44 per cent or more of the managers. It was apparently incomplete since three additional objectives of standardizing materials were mentioned. Every element of Hypothesis VI was supported by 31 per cent or more of the jury. In addition, four new reasons were given for standardizing procedures.

### Simplification

The responses of office managers to questions relating to simplification efforts are summarized in Table 7. Each item in the table is discussed briefly here.

Placement of Supplies, Machines, and Devices. Every member of the jury stated that supplies, machines, and devices are generally placed within the normal working area of the individual who uses them. Some of the comments were:

By all means.

Our equipment is especially designed for that purpose.

Definitely.

Yes, by necessity.

Our layout prevents us from doing as much as we would like.

Accessibility of Current Records. All of the interviewees reported that records to which frequent reference must be made are stored in the general working area of the person who uses them. Some of the records are kept in files which are scattered about the office and others are stored in desks for short periods. One office keeps such records

TABLE 7

The Number of Office Managers, Among Sixteen Interviewed,  
Who Stated that the Following Attempts Are Being  
Made to Simplify Office Operation

Practice	Number
Supplies, machines, and devices are placed within the normal working area of the employee	16
Current records are readily accessible to the worker	16
Attention is given to pre-positioning materials in job preparation	16
Attention is given to recording at the first writing all information needed on a form	16
Devices are used to eliminate unnecessary copying	16
Recording work is divided into small units so errors can be localized	16
Attention is given to arranging the sequence of operations to avoid rehandling	16
Attention is given to the proper control of office space	16
Correct use and care of machines are stressed	16
Attention is being given to simplifying correspondence	16
Work flows in a straight line through the office	15
The flow of work is checked regularly	15
Individuals are encouraged to seek better ways of doing jobs	14
Forms are constantly reviewed to see if they can be improved	13



TABLE 7 (continued)

The Number of Office Managers, Among Sixteen Interviewed,  
Who Stated that the Following Attempts Are Being  
Made to Simplify Office Operation

Practice	Number
Studies are made to determine whether a machine and its operator are giving maximum output	12
Efforts are being made to eliminate the pressure of peak-load periods	12
Attention is being given to matching jobs to employees	4

distributed about the office for a period of six months to a year.

Pre-arrangement of Materials. Although all of the office managers said their employees give attention to pre-positioning materials before beginning a particular job, 19 per cent of them indicated that it is not done on a well-defined basis. Other comments were:

Definitely.

Stenographic desks are used for that purpose.

Especially by bookkeeping machine and key-punch machine operators.

The office boy is responsible for supplying each worker with the materials needed.

Complete Information at a Single Writing. All of the office managers interviewed are interested in all information needed on a form being recorded at the first writing. Six per cent said that it is especially important for the cash report, in the billing department, and in the mail room. Six per cent of the offices require every person who completes a form to sign it so that responsibility can be established if some item is missing.

Devices Used to Eliminate Copying. All of the offices visited use a number of devices to eliminate unnecessary copying when the same material must be written more than once. Some of the devices used are the stencil duplicator, the fluid process duplicator, the Ozulid process duplicator, Bruning process duplicator, the photostat, ordinary carbon paper, one-time carbons, spot carbons, tear sheets, continuous forms,

microfilm, the addressograph, and printing.

Localization of Errors. Every member of the jury reported that recording work is organized so that errors may be readily localized. Six per cent of the employers divide the auditing and billing departments into small sections with a supervisor for each small group. It is the duty of the supervisor to check all of the work done by his group. Another 6 per cent have all recording work checked by a secretary in the department where it originates. A third plan requires each person who records information to initial or sign the sheet on which the recording is made.

Sequence of Operations. Arranging the sequence of office operations to avoid rehandling of materials is considered essential by every member of the jury. Special emphasis is placed on the natural order of routines. For example, work flows directly and naturally from the sales department to the accounts receivable department.

Control of Office Space. Proper use of office space is apparently a real problem to the office manager, since all of the interviewees stated that attempts are being made to control it. Fifty per cent of the businesses use layout charts to help insure wise use of space. In a number of cases the experience of the office manager is depended upon to provide the necessary control. Twelve per cent of the offices have a committee constantly studying the problem of space control, or an industrial engineering division for that purpose.

Correct Use and Care of Machines. Not only are the correct use and care of machines stressed by all of the offices visited, but many have well-defined programs to accomplish the task. In some cases formal classes are organized to teach principles of correct use and care to employees. In other instances department heads or supervisors assume the responsibility for teaching each employee how to properly use and care for his machine. The objective in each case is to have the individual worker assume responsibility for eliminating useless effort and prolonging the life of expensive equipment.

Simplification of Correspondence. All of the interviewees reported that many plans are being used to simplify correspondence. All are attempting to eliminate wordiness in communications of all types. Some of the specific plans include using form letters extensively, pasting printed stickers on statements instead of writing collection letters, eliminating salutations and closings on intercompany communications, using the NOMA simplified letter form, answering letters from suppliers by returning them with notes written in the margins, substituting teletype messages for letters between company branches, and conducting letter-writing classes for both dictators and stenographers. Six per cent of the managers also subscribe to the Howe Letter Writing Service, an organization whose specific purpose is to correct and improve business letters. Twelve letters are submitted each month to that organization for analysis and suggestions for improvement.

Straight-line Work Flow. Only 6 per cent of the office managers

stated that work does not flow in a straight line through his office. Among the other interviewees the general concensus was that physical limitations of the present office buildings prevent the accomplishment of perfect straight-line flow.

Check of Work Flow. One of the offices visited has no system for checking the flow of work through the office to see if it can be improved. In the others, regular checking is done by the office manager, a systems specialist, the department heads, or the individual worker.

Individual Responsibility for Simplification. Twelve per cent of the jurors indicated that no efforts are made to encourage office employees to seek better ways of performing a job. In the remaining 88 per cent of the offices all workers are encouraged to use their own initiative, to be curious, and to make suggestions. Six per cent of the businesses have regular work-simplification classes for all office employees. In about 50 per cent of offices, suggestions from employees are passed orally to the immediate supervisor and from the latter to the office manager who takes whatever action he feels is necessary. In some instances such suggestions must be transmitted through the company's regular suggestion system. Six per cent of the organizations also require that every suggestion be made in writing so that credit can be given to the proper person.

Review of Forms. Some program for the constant review of forms is maintained by 81 per cent of the offices visited. The forms used by

6 per cent of the businesses are subject to constant review by the Interstate Commerce Commission. In other cases forms are reviewed periodically by the office manager, an efficiency committee, company executives, or a methods specialist.

Measurement of Output. Seventy-five of the jury members stated that studies are made to determine whether a machine and its operator are giving maximum output. In most instances time studies are conducted for that purpose. In many cases such studies are relatively easy to conduct since many machines automatically count transactions completed on them. The studies are conducted by division heads, a methods specialist, or the office manager, and may consist of spot checks or regularly scheduled checks. One interviewee remarked, "We are more interested in maximum output from the employee than from the machine. When we buy a machine, we don't expect it to be used every hour during the day."

Elimination of Peak-load Pressures. Responses to questions about peak-load periods revealed that 75 per cent of the office managers are trying to eliminate such pressures by shifting much of the work to slack periods. A few managers transfer workers from one section of the office to another during such periods. Only 25 per cent of the businesses resort to overtime or temporary employees.

Correlation of Jobs and Workers. Some support for the practice of matching a job to a worker was found among the men interviewed, but 75

per cent favor keeping the job standard and matching the worker to it. Primarily in cases of promotion within the organization, the former seems to be desirable.

Objectives of Simplification. Reference to Table 8 indicates that all the office managers believe the primary objectives of simplification efforts are to increase working efficiency, reduce costs, and increase the speed of operations. However, at least 6 per cent in each case feel that other worthy objectives are to improve customer service, increase the accuracy of records, and encourage workers to think for themselves.

Key People in Simplification Work. Reference to Table 9 indicates that 62 per cent of the interviewees stated that the office manager or the division supervisors are the key people in providing simplification ideas. Only 25 per cent of the managers indicated that individual workers are the chief originators of these ideas.

Confirmation of Hypotheses VII, VIII, and IX. The preceding analysis of data collected from office managers indicates that Hypothesis VII was confirmed almost unanimously by the jury. Only one element of Hypothesis VIII failed to receive mention from the jury. Apparently the hypothesis was not complete since the speed factor, mentioned by almost half of the office managers, was not included. Hypothesis IX was verified by almost 62 per cent of the jury.

TABLE 8

The Number of Office Managers, Among Sixteen Interviewed,  
Who Gave the Following Objectives of Simplification

Objective	Number <sup>a</sup>
To increase efficiency	9
To reduce costs	8
To increase speed	7
To improve customer service	2
To increase accuracy	1
To encourage workers to think	1

<sup>a</sup> Although only sixteen office managers were interviewed, the total number of responses in this table is twenty-eight. The reason is that some of the interviewees gave more than one objective of simplification.



TABLE 9

The Number of Office Managers, Among Sixteen Interviewed,  
Who Stated that the Following Are Key People in  
Providing Simplification Ideas

Persons	Number
Supervisory personnel	10
Individual workers	4
Methods experts	2

### Centralization

The opinions of office managers regarding centralization in the modern office are summarized in Table 10. A brief discussion of each item in the table follows:

Centralized Control of Forms. While all of the interviewees indicated that the planning of office work is being centralized, not all offices place the responsibility on the same person. In 56 per cent of the cases final responsibility rests with the office manager, but others who may have charge are the company controller, a vice-president, the head of the systems department, or a forms committee. In 6 per cent of the businesses the majority of forms used must conform to government requirements.

Centralized Control of Supplies. All offices reported that the person responsible may vary with different organizations. The interviewees stated that the following people are responsible in the number of cases indicated:

<u>Person Responsible</u>	<u>Number of cases</u>
Purchasing agent	6
Office manager	5
Stock department head	4
Assistant secretary	1

Centralized Control of Purchases. Responsibility for all routine purchases is vested in the purchasing agent in 88 per cent of the offices

TABLE 10

The Number of Office Managers, Among Sixteen Interviewed,  
Who Stated that Centralization is Taking Place in  
the Following Areas

Practice	Number
Control of the designing and printing of forms is centralized	16
Storage and issuance of office supplies are centralized	16
Responsibility for all purchases is centralized	16
Responsibility for issuing all checks is centralized	16
Central files are used for permanent records	14
Mail is routed through a central department	14
Office work is planned by a central authority	14
Machines are grouped into centralized units	11
Control of files is centralized	10
Duplicating masters and stencils are prepared by a central department	7

visited. In the other 12 per cent the office manager or the assistant secretary has charge of purchases.

Centralized Control of Check Issuance. Although all members of the jury reported that checks are issued by some central authority, there was practically no agreement on the identity of that authority. Those on whom the responsibility rests include the assistant secretary, the accounts payable department, the payroll department, the cashier, the disbursing officer, the controller, the secretary-treasurer, and the office manager.

Centralized Files. Eighty-eight per cent of the office managers indicated that central files are used as much as possible for permanent records. Several men reported 100 per cent centralization of permanent files. In 19 per cent of the offices the permanent files now consist of centrally stored microfilm.

Centralized Mailing Department. All mail is routed through a central department in 88 per cent of the businesses visited. In 6 per cent of the offices a single stamping machine is used, but it is operated by employees from the various departments whenever mail is ready to go out.

Centralized Planning of Work. Planning of all office work is centralized in 88 per cent of the businesses visited. In most cases the office manager is responsible for the planning; but it is sometimes done by a vice-president or by the controller.

Centralized Grouping of Machines. Sixty-nine per cent of the office

managers reported that machines are grouped into centralized production units. Commonly grouped units include accounting machines, punched-card tabulating machines, billing machines, and duplicating machines.

Centralized Control of Files. Although 88 per cent of the jury members stated that central files are used for permanent records, only 62 per cent of them have centralized responsibility for control of those files. Where centralized control is established, the person in charge is either a file room supervisor, a division head, the office manager, or a secretary.

Centralized Preparation of Duplicating Masters. Duplicating masters and stencils are prepared by a central department in less than 50 per cent of the offices visited. A standard comment was, "Each department prepares its own." However, in a majority of cases the master sheets or stencils are run in a central duplicating department.

Objectives of Centralization. Table 11 summarizes the objectives of centralization which were given by the office managers. Seventy-five per cent of the jury stated that a primary objective is to provide for better control of operations. Centralization also increases accuracy and reduces costs, according to a majority of the men questioned. Of lesser importance are improvement of efficiency and elimination of waste.

Confirmation of Hypotheses X and XI. The preceding analysis indicates that Hypothesis X was supported in most cases by the entire jury.

TABLE 11

The Number of Office Managers, Among Sixteen Interviewed,  
Who Reported the Following Objectives of Centralization

Objective	Number <sup>a</sup>
To provide better control	12
To increase accuracy	11
To reduce costs	10
To improve efficiency	8
To eliminate waste	3

<sup>a</sup> Although only sixteen office managers were interviewed, the total number of responses in this table is forty-four. The reason is that most of the interviewees reported more than one objective of centralization.

Every element of Hypothesis XI received support from at least half of the office managers, but it did not include the accuracy element which was mentioned by almost 75 per cent of the men. Neither did it include the elimination of waste which was considered important by 19 per cent of the managers.

### Routinization

Table 12 presents a summary of the opinions of the office-manager jurors concerning routinization in the modern office. Following is a brief discussion of each item in the table.

One-step Routines. Ninety-four per cent of the interviewees reported that they have office workers who devote their entire time to a single operation. Examples of such workers are file clerks, verifying clerks, key-punch operators, bookkeeping machine operators, typists, billing machine operators, calculating machine operators, posting clerks, payroll machine operators, duplicating machine operators, punched-card tabulating machine operators. Six per cent of the men said that all employees must concentrate on a specialty for at least six months or a year after initial employment. Many said that specialization has become an absolute necessity in the office.

Reduction of Monotony. Sixty-seven per cent of the jurors indicated that workers who perform one-step routines constantly seek better ways to do their jobs in an effort to relieve the monotony of the routine.

TABLE 12

The Number of Office Managers, Among Sixteen Interviewed,  
Who Made the Following Statements About Routinization

Statement	Number
Some workers devote their entire time to a single operation	15
Office managers are interested in having workers who are trained to do well only one routine	15
Workers who perform one-step routines consider work simplification a part of that routine	10



Twelve per cent of the employers said that workers who save time by simplifying their tasks are allowed to use the extra time as they choose.

Objectives of Routinization. Table 13 presents a summary of the objectives of routinization which were given by the office managers. It indicates that the primary objective is to increase the efficiency of job performance. Although seven other objectives were given, none were mentioned by more than 19 per cent of the jury.

Confirmation of Hypotheses XII, and XIII. The above analysis shows that Hypothesis XII was supported by 94 per cent of the jury. The first element of Hypothesis XIII was confirmed by 88 per cent of the jurors, and every other element was mentioned by at least 6 per cent. Four new objectives of routinization were revealed through the interviews, but none of them received support from more than 19 per cent of the office managers.

### Scheduling

A summary of the office managers' responses to questions relating to scheduling of office work is presented in Table 14. A brief discussion of each item is given.

Natural Division of Work. All of the interviewees reported that work is divided into units which follow in natural order. There were many expressions of the desirability of keeping the units as small as possible as a further aid in planning the work. Six per cent of the

TABLE 13

The Number of Office Managers, Among Sixteen Interviewed,  
Who Gave the Following Reasons for Routinizing  
Office Work

Reason	Number <sup>a</sup>
To increase job-performance efficiency	14
To provide for better scheduling	3
To increase speed	2
To reduce costs	2
To establish responsibility for work	2
To simplify the employee training program	2
To improve the quality of work	1
To provide for flexibility in office operation	1

<sup>a</sup> Although only sixteen office managers were interviewed, the total number of responses in this table is twenty-seven. The reason is that some of the interviewees reported more than one objective of routinization.

TABLE 14

The Number of Office Managers, Among Sixteen Interviewed,  
Who Stated that the Following Scheduling  
Devices are Used

Device	Number
Work is broken into units which follow natural divisions	16
Specific times are allotted to office operations	11
Each day's work is allotted to specific individuals	11
A definite system is used to route work through the office	10

offices have a systems and methods department whose duty is to determine the best possible division of work.

Specific Time Allotments. Seventy-five per cent of the office managers allot specific times to various operations in the office. The time allotments may vary from one week to only a few minutes. For example, one person is expected to complete the preparation of a weekly payroll in three days, while another person is expected to sort and deliver four hundred pieces of mail in one hour. Specific time allotments are applied especially to machine operators.

Daily Schedules. Fifty-six per cent of the offices visited set up daily schedules and allot portions of the work to specific individuals. Each worker is then expected to carry his portion of the total work load. Some of the schedules are prepared a month in advance by the office manager while others are prepared weekly or daily.

Systems for Routing Work. Sixty-two per cent of the jurors use a definite system to control the routing of work through the office. The most frequently used device is the flow chart or some variation thereof. Those offices which have no well-defined system seem to depend on the experience of the office manager to control the work flow. All interviewees agreed that an understanding of the whole office operation by the individual worker is an important aid to the smooth flow of work.

Objectives of Scheduling. Reference to Table 15 indicates that

TABLE 15

The Number of Office Managers, Among Sixteen Interviewed,  
Who Mentioned the Following Objectives of Scheduling

Objective	Number <sup>a</sup>
To facilitate the smooth flow of work	13
To eliminate wasted time	10
To reduce costs	5
To increase speed	5
To improve the quality of work	3

<sup>a</sup> Although only sixteen office managers were interviewed, the total number of responses in this table is thirty-eight. The reason is that most of the interviewees gave more than one objective of scheduling.

the members of the jury feel that the primary objectives of scheduling are to aid the smooth flow of work and eliminate wasted time. Also mentioned were cost reduction, increased speed, and improved quality of work.

Confirmation of Hypotheses XIV and XV. The preceding discussion indicates that Hypothesis XIV received support from 69 per cent of the office managers interviewed, and Hypothesis XV was confirmed by 62 per cent. Although Hypothesis XV was in agreement with the primary scheduling objectives revealed through the interviews, it did not include all of those which were given by the office managers.

#### Humanization

The responses of the jury to questions concerning humanization in the modern office are summarized in Table 16. A brief discussion of each item in the table follows:

Dignity of the Job. Every member of the jury reported that efforts are made to impress upon the individual the importance of his job. They agree that employees need to feel that they are making a real contribution to the operation of the business in which they work. In most cases it is the responsibility of either the office manager, a department head, or a division supervisor to make the individual worker feel that his job is an important one. In two organizations, special training programs are maintained for that purpose.

TABLE 16

The Number of Office Managers, Among Sixteen Interviewed,  
Who Stated that the Following Considerations are  
Given to Employee Welfare

Consideration	Number
Employees are made aware of the importance of their jobs	16
Employee benefits such as pension plans and insurance plans are maintained	16
A promotion plan is maintained to provide for growth within the company	16
Employees are informed about the business in which they work	15
Rest periods are provided	10
An employee suggestion system is maintained	9
Monetary inducements are offered for outstanding accomplishment	5

Employee Benefits. Each of the businesses represented in the jury offers some sort of retirement plan, salary administration plan, accident and health insurance, and life insurance. Many of them also offer paid vacations, sick leaves, and bonuses. In a few instances the entire cost of the benefit program is absorbed by the company, but usually the employer and the worker share the cost.

Promotion Plans. All of the businesses visited provide for promotion within the organization. The general opinion was that it is undesirable to go outside the company for people to fill responsible positions. All of the office managers are interested in having employees progress within the company, and become concerned when one fails to do so. That concern is especially great when the worker in question is a man.

Information About the Business. Only 6 per cent of the businesses do not inform office workers about the general activities of the company. Information is commonly given through office manuals, company magazines or newspapers, letters from company officers, published financial statements, moving pictures, management-employee conferences, employee induction programs, and private interviews.

Rest Periods. Formal rest periods are provided by 62 per cent of the companies represented in the jury. Generally two such rest periods are allowed each day and the usual length of each is ten minutes. In some instances the rest periods are controlled by the office workers' union. The companies that do not have formal rest periods allow



employees the freedom of choosing their own rest periods. Many of the businesses also provide cafeterias or snack bars for the convenience of employees during the lunch hour or rest periods.

Suggestion Systems. Fifty-six per cent of the offices have formal employee suggestion systems designed to aid in keeping the workers happy with their jobs. Twelve per cent of the office managers reported that they had formal systems at one time, but they were discarded because of lack of interest on the part of the employees. Those managers who said that no formal system is maintained were quick to point out that suggestions are always welcome and may be readily handled on an informal basis.

Monetary Rewards. Only 31 per cent of the businesses offer monetary rewards to office workers for outstanding accomplishments. However, 25 per cent of the companies offer such rewards to factory workers. Six per cent of the offices reported that such prizes were formerly given, and 6 per cent are prohibited by the union from offering rewards. Sixty-nine per cent of the office managers agreed that promotions and salary increases provide better incentives for outstanding work. Some companies also give recognition through service awards and publicity in company publications.

Objectives of Humanization Efforts. Reference to Table 17 indicates that 81 per cent of the jurors consider the reduction of employee turnover and the reduction of absenteeism to be the primary objectives of efforts to improve employee welfare. Fifty-six per cent also feel that

TABLE 17

The Number of Office Managers, Among Sixteen Interviewed,  
Who Gave the Following Objectives of Humanization  
Programs

Objective	Number <sup>a</sup>
To reduce employee turnover	14
To reduce absenteeism	13
To improve the quality of work	9
To increase production	5
To reduce costs	2

<sup>a</sup> Although only sixteen office managers were interviewed the total number of responses in this table is forty-one. The reason is that most of the interviewees gave more than one objective of humanization efforts.

increased employee welfare helps to improve the quality of work. Of lesser importance are increased production and cost reduction.

Confirmation of Hypotheses XVI and XVII. The preceding analysis indicates that Hypothesis XVI was confirmed by a large majority of the jury. Two elements of Hypothesis XVII received almost unanimous support from the office managers, while only one element failed to receive mention from them.

#### Outstanding Current Problems

Table 18 presents a summary of the opinions of the jury regarding the greatest problem facing the office manager today. Reference to the table indicates that the problem of locating and keeping qualified personnel is by far the greatest one that the present-day office manager faces. It is also interesting to note that 12 per cent of the office managers are very much concerned about locating workers who have an interest in their job in addition to the ability to perform it adequately. Also listed as major problems are cost reduction, production speed, and governmental interference.

TABLE 18

The Number of Office Managers, Among Sixteen Interviewed,  
Who Stated that the Following Are the Primary Problems  
Facing the Office Manager Today

Problem	Number <sup>a</sup>
To secure and keep qualified personnel	12
To reduce office costs	3
To secure employees who are interested in their work	2
To produce records and reports with sufficient speed	2
To overcome governmental interference	1

<sup>a</sup> Although the sixteen office managers were asked to indicate the greatest problem facing them today, some gave more than one answer. Therefore, the total number of responses in this table is twenty.

## CHAPTER V

### CONCLUSIONS AND RECOMMENDATIONS

#### Introduction

The primary steps followed in conducting this study were (a) to identify through a review of current literature office practices and the reasons for their use, (b) to formulate hypotheses with respect to the major areas of emphasis, and (c) to test the hypotheses by means of personal interviews with a group of selected office managers who served as a jury for that purpose. The conclusions presented in this chapter are based upon the jury's confirmation or rejection of the hypotheses.

Certain recommendations are offered with the hope that they will be of some help to business education teachers in performing the important function of developing in their students much-needed occupational intelligence.

#### Conclusion No. 1

**Hypothesis I: The use of office machines is being increased.**

The above hypothesis was confirmed by every member of the jury.

(See Table 1)

#### Conclusion No. 2

**Hypothesis II: More machines and mechanical devices are being used in order to reduce the cost of office operation, increase**

the speed of operations, increase the accuracy of records, reduce the number of office workers required, and relieve the office worker of some of the burden of repetitive routines.

The speed element of the above hypothesis was confirmed by 75 per cent of the jury, the cost and accuracy elements by 50 per cent, and all the other elements by 6 per cent or more. Other objectives of mechanization revealed through the interviews are to simplify work, to reduce office space and to increase efficiency. (See Table 2) Although the office managers frequently talked about increasing efficiency, the expression is ambiguous and may include many other factors, such as cost reduction, increased accuracy, and the like.

### Conclusion No. 3

Hypothesis III: Office materials are being standardized.

The above hypothesis was confirmed by 81 per cent of the jury.

(See Table 3)

### Conclusion No. 4

Hypothesis IV: Standardization of materials is taking place in order to reduce the cost of materials through volume purchases, obtain better maintenance service, and simplify recording activities.

The simplification element of the above hypothesis was confirmed by

88 per cent of the jury, the cost element by 75 per cent, and the maintenance element by 44 per cent. Three new objectives of materials standardization supported by at least 6 per cent of the jury are to improve office appearance, to permit ready transfer of workers between jobs, and to save space. (See Table 4)

#### Conclusion No. 5

Hypothesis V: Office procedures are being standardized.

The above hypothesis was confirmed by 94 per cent of the jury. (See Table 5)

#### Conclusion No. 6

Hypothesis VI: Standardization of procedures is taking place in order to improve the efficiency of job performance, reduce costs, and increase production.

The cost element of the above hypothesis was confirmed by 50 per cent of the jury, the efficiency element by 44 per cent, and the production element by 31 per cent. Work simplification is the only new objective which received support from as many as 31 per cent of the jury. (See Table 6)

#### Conclusion No. 7

Hypothesis VII: Attempts are being made to simplify office materials, methods or procedures by which each job or task is accomplished, and the motions of the individual worker

at each task.

The above hypothesis was confirmed by all members of the jury.

(See Table 7)

Conclusion No. 8

Hypothesis VIII: The chief objectives of simplification efforts are to reduce labor costs, increase effectiveness of records, improve customer services, improve working conditions, and develop executive ability.

The cost element of the above hypothesis was confirmed by 50 per cent of the jury, the customer-service element by 12 per cent and the executive-ability element by 6 per cent. New objectives of simplification which received support from at least 44 per cent of the jury are to increase efficiency and to increase speed. (See Table 8) Again it may be noted that the expression to increase efficiency has no definite meaning.

Conclusion No. 9

Hypothesis IX: Supervisors on the various levels are the key people in the majority of simplification programs.

The above hypothesis received support from 62 per cent of the jury. (See Table 9)

Conclusion No. 10

Hypothesis X: Centralized control of office operations is being established.



The above hypothesis was confirmed by 88 per cent of the jury.

(See Table 10)

Conclusion No. 11

Hypothesis XI: The primary reasons for centralization are to establish responsibility for completing work, reduce costs, and increase operating efficiency.

The responsibility element of the above hypothesis was confirmed by 75 per cent of the jury, the cost element by 62 per cent, and the efficiency element by 50 per cent. To increase accuracy is a new objective which was supported by 69 per cent of the jury. (See Table 11)

Conclusion No. 12

Hypothesis XII: Office work is frequently divided into one-step routines with separate individuals concentrating on the different operations. Therefore, office managers are interested in securing some workers who are trained to do well only one of these routines.

Both elements of the above hypothesis were confirmed by 94 per cent of the jury. (See Table 12)

Conclusion No. 13

Hypothesis XIII: The primary reason for dividing work into simple routines is to improve the efficiency of performance

at each task, thus increasing speed and accuracy  
and reducing costs.

The efficiency element of the above hypothesis was confirmed by 88 per cent of the jury. No other objective of routinization received support from more than 19 per cent of the office managers. (See Table 13)

Conclusion No. 14

Hypothesis XIV: Attention is being given to conducting office work  
according to a schedule prepared in advance.

The above hypothesis was confirmed by 69 per cent of the jury.  
 (See Table 14)

Conclusion No. 15

Hypothesis XV: The primary objectives of scheduling are to aid the  
smooth flow of work and eliminate wasted time.

All of the above hypothesis was confirmed by 62 per cent of the jury. Three new objectives of scheduling were revealed during the interviews, but neither of them received support from more than 31 per cent of the interviewees. (See Table 15)

Conclusion No. 16

Hypothesis XVI: Efforts are being made to provide for the welfare of  
the office worker at his job.

The above hypothesis was confirmed by every member of the jury.  
 (See Table 16)

## Conclusion No. 17

Hypothesis XVII: The primary objectives of humanization efforts are to increase output, decrease waste, improve the quality of work, reduce absenteeism, and reduce employee turnover.

The employee-turnover and absenteeism elements of the above hypothesis were confirmed by 81 per cent of the jury. The quality-of-work element was supported by 56 per cent of the managers and the output element was supported by 31 per cent. No office manager said that humanization efforts are expected to decrease waste. (See Table 17)

## Conclusion No. 18

Seventy-five per cent of the jury stated that the primary problem facing the office manager today is to secure and keep qualified personnel.

## Recommendations

If the prospective office worker is to possess a reasonable amount of occupational intelligence, he must develop some understanding of the relationship of the office to business management. He should understand that the office is the focal point from which the many activities of the business are directed. Except for the services of the office, management would not have the many records, reports, and analyses upon which to base important decisions. Therefore, business education teachers

should provide instruction which will enable students to understand and appreciate the important role of the office in the operation of any business.

Instruction should be provided which will develop in the student an understanding of the many pressures under which the modern office operates. Such pressures include demands for more information, greater speed in the production of records and reports, reduction of office costs, and greater concern for employee welfare. All of these pressures have an important bearing on the relationship of the office worker to his job, to management, and to his fellow workers.

Business education teachers should provide instruction which will help the student understand the part that office mechanization plays in reducing many of the pressures of the office. Both students and teachers should learn to be observant of the changes which are taking place in office mechanization.

Instruction should be provided which will help the student understand the importance of accepting whatever materials he finds on the job. For example, an office employee may be required to use a typewriter different from that which he used in school, because the office has standardized on a particular kind of typewriter. The prospective worker should understand why the business finds it advantageous to use standard equipment.

Instruction should be provided which will enable the student to understand why it is important for him to accept the standard procedures used by the business which employs him. Such an understanding can be developed

by impressing upon the student the reasons why businesses develop and use standard procedures. Activities in the classroom may be organized so as to provide experience in following standard procedures.

Instruction in work simplification principles should be provided in business education classes. Such instruction should include practice in simplifying routine classroom tasks. The objectives of simplification should be made clear in order to provide a purpose for the instruction and practice. Also, students should understand that advancement to office supervisory positions will likely carry with it responsibility for developing simplification ideas.

Business education classes should be organized so that students receive experience in working under the direction of others. Each student also should be given an opportunity to direct the work of others. Provision should be made to develop in the student an understanding of the reasons why some persons must work under the supervision of others. Every prospective office worker should be taught the proper relationship of the supervisor to the supervised.

Instruction should be provided which will develop in the student an understanding of the importance of planning work in advance. Every student should be given an opportunity in business education classes to plan his own work and the work of others.

Instruction should be provided which will enable prospective office workers to understand and appreciate the many efforts which businesses are making to provide for the welfare of the office worker at his job.

Every student should understand that for every benefit received there is an equal obligation to serve the employer who provided it.

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**VITA**

## BIOGRAPHICAL SKETCH

I was born near Galax, Virginia on February 12, 1926. My early education was received in the public schools of Grayson County, and I was graduated from Galax High School, Galax, Virginia in 1943. Immediately after graduation, I enlisted in the United States Naval Air Corps. Due to an injury received during a training period at the University of North Carolina, I was transferred from the Air Corps to the Naval Reserve Officers Training School at Duke University, where I remained until my release from active duty in 1946. In September, 1946, I returned to Duke University to complete the requirements for an A. B. Degree in Economics. After receiving my degree and a commission of Ensign in the United States Naval Reserve in January, 1947, I taught at Galax High School for three years. I left my teaching position to begin graduate study at Virginia Polytechnic Institute in September, 1950. On September 1, 1951, I was appointed Instructor in Business Education At Virginia Polytechnic Institute.

*James Curtis Fall*

**APPENDIX A**

206 South Main Street  
Blacksburg, Virginia  
March 27, 1952

Mr. David T. Young  
Reynolds Metals Company  
3rd and Grace Streets  
Richmond, Virginia

Dear Mr. Young:

At present I am engaged in a study of current office practices in Virginia. With the approval of Mr. Bahen I am checking my findings with a number of National Office Management Association members in Richmond.

I shall appreciate it very much if you will indicate at the bottom of this sheet the approximate number of office workers employed by your organization, and return it to me in the enclosed envelope.

Very truly yours,

J. Curtis Hall

Enclosure 1

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More than 100 \_\_\_\_\_ More than 75 \_\_\_\_\_ More than 50 \_\_\_\_\_

More than 35 \_\_\_\_\_ More than 25 \_\_\_\_\_ Less than 25 \_\_\_\_\_

206 South Main Street  
Blacksburg, Virginia  
April 7, 1952

Mr. David T. Young  
Reynolds Metals Company  
3rd and Grace Streets  
Richmond, Virginia

Dear Mr. Young:

Thank you for supplying me with the information about the number of office workers in your organization. In order to complete my study of current office practices, I should like to have an opportunity to talk briefly with you about it.

I am now making plans to be in Richmond on April 16, 17 and 18. I should like to know if I may call on you around 1:30 P.M. on the 16th. If that time is not convenient, please let me know if you can see me at any time on the days mentioned. A note at the bottom of this page will be appreciated. A self-addressed envelope is enclosed for your convenience.

Very truly yours,

J. Curtis Hall

Enclosure 1

**APPENDIX B**



## INTERVIEW 1

Group A

1. Are the number and types of office machines being increased? What are some examples?

Yes. IBM Tabulating, Sunstrand bookkeeping, and electric and manual typewriters, because volume of work demands it.

2. Do you have office machine needs which are not met?

No.

3. What factor above all others is responsible for the introduction of more machines into the office?

Volume of work and local management requirements are responsible.

Group B

1. What items of office equipment are being standardized?

Steel furniture (85%) and file cabinets (5 drawer) are being made standard.

2. Is an effort being made to standardize office supplies?

Yes. Forms, pencils stationery, and other supplies are standard. Each office buys small items that it needs.

3. Are standard employment procedures used?

Yes. Application is company-wide. Standard interviews are used.

4. Do billing and accounting procedures provide standard statistics?

Yes. Such is true throughout the company.

5. Are paper sizes and the spacing standard for all forms and records?  
Yes. Specialists standardize it for the company.
6. Is the arrangement of information on records and forms being standardized?  
Yes.
7. Are job-performance procedures the same for all people doing the same kind of work?  
Yes.
8. Is a standard work output required of all office workers?  
Where comparison is possible, output requirements are standard.
9. What are the chief objectives of standardizing procedures?  
They are production, efficiency, and economy.
10. What are the chief objectives of standardizing materials?  
The chief objectives are to save space, get better production, better efficiency, and economy. Also, steel furniture lasts longer and looks better than that made of wood.
11. What determines whether or not a particular procedure or material will be made standard?  
Routine and volume are the determining factors. A systems and methods man combines one procedure for 12 divisions.

### Group C

1. Are materials, machines, or devices placed within the normal working area of the employee?  
Yes. That is definitely essential.

2. Are current records readily accessible to the worker?

Yes.

3. Does work flow in a straight line through the office?

Yes. There is no second handling.

4. Is attention given to recording at the first writing all the information needed on a particular form?

Yes. This is true for the cash report, mail room, billing department, and examination clerk.

5. Do you use devices to eliminate unnecessary copying when the same thing is written more than once?

Yes. One time carbon, spot carbon, mimeograph, and duplicators are employed.

6. Is recording work divided into small units so that errors can be localized readily?

Auditing and billing are divided into sections. Small groups have a supervisor who checks the work.

7. What is being done about the pressure of peak-load periods?

A minor problem is the end of the month load. Overtime work is used to meet the deadline.

8. Are individual workers encouraged to seek better ways of doing specific jobs?

Yes.

9. What system is used to incorporate suggestions made by employees?

Suggestion system and idea plan are used effectively.

10. Is attention given to the sequence of operations?

Yes. Certain work is to be done by a certain day so that work can go on.

11. What devices are used to control the use of office space?

A layout chart was used at beginning, but now experience of the manager is relied upon.

12. Is the flow of work through the office checked at regular intervals to see if it can be improved?

Yes. A continual check is made by systems man.

13. Are studies made to determine to what extent a machine and its operator are giving maximum output?

Yes. Bookkeeping machines are an example of such a study.

14. Are business forms constantly reviewed in an effort to improve the arrangement or to eliminate unnecessary information?

Yes. A systems and methods man does the reviewing.

15. Is attention being given to pre-positioning of materials in job or work preparation?

Some are predetermined. Bookkeeping and key punch are examples.

16. Is the correct use and care of machines being stressed in order to eliminate useless effort?

Yes.

17. What is being done to simplify correspondence?

Form letters, training class for dictators and stenographers, and reviewing letters for composition improvement are employed.

18. Who are the key people in providing work simplification ideas?

They are the supervisors or manager, and persons doing the work, (50-50).

19. What is being done about matching office workers and jobs?

Putting a person on the job who is best qualified for it and adjusting the job to the worker are both used.

20. What is the most important result of work simplification efforts?

Efficiency and economy lead in importance.

Group D

1. Who is responsible for the planning of all office work?

The office manager has this responsibility.

2. Are central files being used as much as possible for permanent records?

Yes. 100% system standard is used.

3. Who is in charge of the central files?

The file supervisor takes charge of these.

4. Who has control of the designing and printing of all forms?

The home office or controller's office are responsible, with a forms engineer doing the designing.

5. Who controls storage and issuance of all office supplies?

The office manager does the controlling.

6. Who is responsible for issuing checks and purchase orders?

The office manager is responsible.

7. Do you operate a central mailing department?

Yes.

8. Are all duplication masters or stencils prepared by a central department?  
Yes. That is done in the central stenographic department.
9. Are machines and operators grouped into centralized production units?  
Yes. Tabulating and bookkeeping are the units.
10. What are the chief advantages of centralization?  
Flexibility and better control through measured output are the chief advantages.

#### Group E

1. Do you allot specific times to various operations performed in the office?  
Yes. Example: Admittances in the mailing room are from 8:00 to 11:00.
2. What devices are used to route work through the office?  
Route sheets carried by messengers are used.
3. Is work broken into units which follow natural divisions?  
Yes. It is developed by systems and methods personnel.
4. Is some system used to allocate each day's work to specific individuals?  
Yes. A monthly schedule for each work day is kept by the office manager.
5. What is the chief advantage of scheduling work in advance?  
To facilitate work and save time is the chief advantage.

Group F

1. Do some office workers devote their entire time to a single operation?

Yes. Bookkeeping and machine operators and clerks who file tickets numerically remain on the same job.

2. Do such workers consider the simplification of their work a part of the normal routine?

Yes. Slogans "We must find a better way" are posted through the office.

3. Are office managers interested in having employees trained to do a single task well?

Yes.

4. What is the most important reason for dividing office work into many individual operations?

Efficiency is the outstanding reason.

Group G

1. Do you inform office workers about the business in which they work?

Yes. Indoctrination, employee forums and company officials tell about world-wide operations and explain financial statements.

2. Do employees know the purpose of the operation they perform?

Yes. They learn through job analysis, evaluation, etc.

3. How is the individual worker made aware of the importance of his job?

An immediate supervisor explains to him why he does the job a certain way.

4. Are employee benefits such as pension plans, accident and health insurance, salary administration plans, etc., maintained?

Yes. Also, hospitalization and sick leave are included.

5. Is a promotion plan maintained to provide for growth within the organization?

Yes. All executive positions are filled by men within the organization.

6. Is some sort of employee suggestion system maintained?

Yes. Formal suggestion is maintained.

7. Are monetary inducements such as prizes and awards offered to individuals for outstanding accomplishments?

Yes. Cash and prizes are awarded.

8. What other provisions are made to give recognition to individuals for outstanding accomplishment?

A service button, Diamond club for 20 years or more of service, and pictures in the company magazine of people who are promoted.

9. Are rest schedules provided?

There is no definite schedule. Such is left up to individuals.

10. What are the primary reasons for concern about employee welfare?

A definite interest in workers aids in getting and keeping good employees. It also provides happier and better working conditions.

#### Group II

1. What is the greatest problem facing the office manager today?

Keeping good employees and cost reduction head the list of problems.



## INTERVIEW 2

Group A

1. Are the number and types of office machines being increased? What are some examples?

Yes. Billing and payroll machines are being increased and are directed toward puncher-card (Remington Rand).

2. Do you have office machine needs which are not met?

No.

3. What factor above all others is responsible for the introduction of more machines into the office?

The elimination of errors and greater volume are responsible.

Group B

1. What items of office equipment are being standardized?

Desk heights, metal desks, and typewriters are being made standard.

2. Is an effort being made to standardize office supplies?

Yes. Sizes of forms, carbons, and stencils are standard, with one time carbons and four-part forms being most commonly used.

3. Are standard employment procedures used?

Yes. They begin at a certain rate and advance after three months or so. Interviews but no tests are given except for those given stenographers by personnel and accepted by department heads.

4. Do billing and accounting procedures provide standard statistics?

Yes. Uniform reports are presented each month, with sales being broken down by divisions, salesmen, etc., and commission statements derived from these.

5. Are paper sizes and the spacing standard for all forms and records?

They are standard for correspondence.

6. Is the arrangement of information on records and forms being standardized?

The arrangements are standard on statements. The name appears at the top of the page.

7. Are job-performance procedures the same for all people doing the same kind of work?

Yes. This is particularly true for payroll and billing.

8. Is a standard work output required of all office workers?

Yes. Such is the case in billing and payroll, but there is not enough routine to set other standards.

9. What are the chief objectives of standardizing procedures?

To increase efficiency is the main purpose.

10. What are the chief objectives of standardizing materials?

Versatility, efficiency, and economy are outstanding objectives.

11. What determines whether or not a particular procedure or material will be made standard?

Repetition of job, test of efficiency, and results of tests determine whether there will be standardization.

Group G

1. Are materials, machines, or devices placed within the normal working area of the employee?

Yes. Machines are certainly within that area, and cabinets are all around the office.

2. Are current records readily accessible to the worker?

Yes. Records for six months or one year are readily accessible.

3. Does work flow in a straight line through the office?

Generally, yes. It is definitely true in billing and order handling.

4. Is attention given to recording at the first writing all the information needed on a particular form?

Yes. They are recorded completely by punch-card by one individual, if possible.

5. Do you use devices to eliminate unnecessary copying when the same thing is written more than once?

Yes. Mimeograph and photostats are most widely used.

6. Is recording work divided into small units so that errors can be localized readily?

Yes. Each unit of recording is done by the secretary in the department where it originated.

7. What is being done about pressure of peak-load periods?

A complete set of statements once a month, planning ahead or moving to slack periods, spread peak, and summary cards made all along relieve the peak-load periods.

8. Are individual workers encouraged to seek better ways of doing specific jobs?

Yes, definitely.

9. What system is used to incorporate suggestions made by employees?

Suggestions are routed first to the supervisors and then to the office manager.

10. Is attention given to the sequence of operations?

Yes. Sales to accounts payable is an example.

11. What devices are used to control the use of office space?

A layout chart for each department and changes made by manager and department heads control the space.

12. Is the flow of work through the office checked at regular intervals to see if it can be improved?

Yes. One boy working on methods does the checking.

13. Are studies made to determine to what extent a machine and its operator are giving maximum output?

Time studies are foremost here.

14. Are business forms constantly reviewed in an effort to improve or to eliminate unnecessary information?

Yes. Periodic reports are submitted to NOMA.

15. Is attention being given to pre-positioning of materials in job or work preparation?

Yes. Department head supervisors see that cabinets are close by and that stenographer desks are used.

16. Is the correct use and care of machines being stressed in order to eliminate useless effort?

Yes. Effort is being made to overcome bottlenecks.

17. What is being done to simplify correspondence?

We send twelve letters each month to the HOWE letter writing service to be corrected and improved.

18. Who are the key people in providing work simplification ideas?

This is taken care of by department heads.

19. What is being done about matching workers and jobs?

Individuals are matched to the correct job.

20. What is the most important result of work simplification?

It increases efficiency and encourages to think more.

Group D

1. Who is responsible for the planning of all office work?

The office manager shares responsibility with the department heads.

2. Are central files used as much as possible for permanent records?

Yes.

3. Who is in charge of the central files?

Each department has charge of its own.

4. Who has control of the designing and printing of all forms?

They are designed by the department which uses them, and are approved by the office manager.

5. Who controls the storage and issuance of all office supplies?

The purchasing and stock department head takes care of them.

6. Who is responsible for issuing checks and purchase orders?

Accounts payable department is responsible for all checks except payroll purchase orders which are handled by the payroll department.

7. Do you operate a central mailing department?

Yes. It is operated by one person.

8. Are all duplication masters or stencils prepared by a central department?

They are cut by the department concerned, and are produced in one department.

9. Are machines and operators grouped into centralized production units?

Yes, except for typists.

10. What are the chief advantages of centralization?

It offers flexibility and better control.

#### Group E

1. Do you allot specific times to various operations performed in the Office?

Yes. For example, the sales department operates on a definite schedule.

2. What devices are used to route work through the office?

The experience of the supervisors, along with the human element, is depended upon.

3. Is work broken into units which follow natural divisions?

Yes.

4. Is some system used to allocate each day's work to specific individuals?

Yes. It is taken care of by the department heads.

5. What is the chief advantage of scheduling work in advance?

Advance scheduling cuts time and facilitates work.

#### Group F

1. Do some office workers devote their entire time to a single operation?

Yes, most of them.

2. Do such workers consider the simplification of their work a part of the normal routine?

Yes. If simplified, the entire day can be utilized to best advantage.

3. Are office managers interested in having employees trained to do a single task well?

Yes. Each employee remains on the initial job for six months or a year.

4. What is the most important reason for dividing office work into many individual operations?

It increases efficiency and permits the individual to specialize in his job.

#### Group G

1. Do you inform office workers about the business in which they work?

Yes. The office manager takes care of that detail.

2. Do employees know the purpose of the operation they perform?

Yes, definitely.

3. How is the individual worker made aware of the importance of his job?

The supervisor talks with him and lets the individual feel that he has a place.

4. Are employee benefits such as pension plans, accident and health insurance, salary administration plans, etc., maintained?

Yes. All of these are had, along with group hospitalization and life insurance.

5. Is a promotion plan maintained to provide for growth within the organization?

Yes. Occasionally the top man comes through ranks.

6. Is some sort of employee suggestion system maintained?

There is no formal suggestion system, but ideas are presented to supervisors and then passed along.

7. Are monetary inducements such as prizes and awards offered to individuals?

There are inducements for the plant and sales force, but none for the office. A plan for the latter is being established.

8. What other provisions are made to give recognition to individuals for outstanding accomplishment?

Oral compliments are given office personnel for having done a good job.

9. Are rest periods provided?

A schedule was provided, but was voted out. At present, the individual chooses his own.

10. What are the primary reasons for concern about employee welfare?

It makes the employee happier on the job and helps to keep good workers.



Group II

1. What is the greatest problem facing the office manager today?

Foremost is increased volume of paper work in proportion to output which brings need for efficiency and machinery. Too, the business must show definite interest in the worker.