

# An Abstract of

## THE ORIGIN AND EXTENT OF STANDARDS IN CLERICAL WORK

### **The Problem**

This investigation of the origin and extent of standards in clerical occupations was designed to accomplish several important purposes. First, the hitherto indistinct origins of standards of performance in clerical work utilized by school and business were to be identified. The development of the early standards was to be traced down to the present day and in that process the major influences and trends were to be determined. The adequacy and efficiency of existing standards were to be appraised in terms of present needs and principles. Finally, possible opportunities for the improvement of existing standards were to be indicated.

### **The Importance of the Investigation**

The nature of the early standards is exceedingly important to present-day business men and business educators because these measures inevitably became the foundations or patterns for later efforts to identify and to maintain efficiency in the face of the revolutionary changes in office operations accompanied by the almost astronomical growth in the size of the clerical working force.

A preliminary examination of pertinent business and professional literature and discussions with business men and educators made it apparent that present standards were not providing an adequate basis for the evaluation of competency to perform clerical operations. There were many differences between standards stated by both business and schools, and standards actually observed in practice. Some educators and business men apparently had no definite standards of performance to facilitate their efforts.

The waste and other tragic consequences of the continued utilization of inadequate standards could hardly be minimized when, for example, the census of 1940 revealed that there were about 4,500,000 gainfully employed clerical workers and when in 1942 it was estimated that there were over 1,150,000 students enrolled in secondary school courses in typewriting alone.

Obviously it is only through comprehension of the origins and growth of standards in clerical work that today's business educators and business men may fully understand the present situation and may then deal with it effectively. Since no exhaustive investigation of the origins and development of standards in clerical occupations had apparently ever been undertaken, it was the purpose of this study to fulfill the fundamental need.

## **The Method**

The nature of the problem involving the discovery of origins of standards in clerical work, the tracing of developments, and the identification of influences and trends, suggested the utilization of the historical method in the broad sense.

Historical information was gathered through the utilization of several processes: 1. library investigation of periodicals, documents, books, and other publications, 2. inter-library loan for the examination of theses and out-of-print books, 3. personal interviews with elderly persons associated with business education and office management, 4. correspondence with old-timers, 5. purchase of miscellaneous reports and other publications. Early periodicals related to shorthand, typewriting, court reporting, and business management were found to be particularly valuable. The New York Public Library (42nd Street) was discovered to be the depository of many shorthand collections including those of Beale, Eldridge, Gregg, Hefley, National Shorthand Reporters Association, New York State Shorthand Reporters Association, O'Keefe, Pitman, and Rockwell.

Information pertinent to the identification of present trends was obtained from the more recent numbers of periodicals and from the later books, booklets, pamphlets, theses, abstracts, and reports of various types. In order to clarify current practices even further, the writer employed three additional procedures: 1. correspondence with individuals, associations, and agencies in related fields; 2. personal visits to school and business offices; and 3. personalized questionnaire letters sent to business concerns.

## **Evidence for Conclusions**

Publications pertaining to the history of the typewriter indicated that attempts to evaluate the performance of the machine dated from the pioneer experiments of Sholes, the inventor. Early periodicals served to establish the fact that speed in stenography received a heavy accent when shorthand skill was applied to business purposes. However, these publications also revealed that the short-spurt words a minute standard was never developed with office production problems in mind and, consequently, there was dis-

satisfaction with that standard as a valid measure of functional competency very soon after its popular adoption. Numerous criticisms and suggestions appeared in the literature but no effective remedial measures resulted for some time, due in large part to formidable background factors which were the topics of frequent articles in periodicals. Personal traits and other qualifications in addition to typewriting or stenographic skill were likewise discussed in various publications. The development of standards in clerical occupations not involving typewriting or stenography was not attempted for many years because of the tremendous changes in office practices which were taking place. The changes were the subject of a number of brief articles in periodicals.

The early business magazines and management publications furnished accounts of the awakening of the business man to the possibilities of efficiency in office operations. This movement coincided with the work of Emerson, Taylor, and Leffingwell. Business men reported their new techniques in office management in contributions to various journals. Later on business associations undertook broader studies which were then published in organizational pamphlets and summarized in management magazines.

Educational literature indicated, however, that business educators generally failed to grasp the implications of scientific management. Research conducted by business educators finally began to appear in professional publications around World War I and the 1920's. At approximately the same time psychological test experts commenced to develop clerical tests and to report experiments in periodicals and organs of learned societies. Unfortunately these contributions failed to provide the improved standards required.

The gradual development of business training on the college level resulted in increased numbers of texts, manuals, and handbooks devoted to office management and related subjects. Standards in clerical occupations also received attention in the yearbooks of organizations of business educators starting around 1934 when the effects of the depression created obvious new problems in commercial training.

While isolated instances of cooperative efforts to improve standards had occurred before, educators and business men established much firmer mutual relationships toward the end of the 1930's. This development was responsible for the production of additional publications and materials related to the persistent problem of identification of competency. The continuing combined efforts of school men and employers have furnished numerous surveys and reports regarding standards employed in connection with office operations and school training.

The correspondence with old-timers and the interviews with elderly persons associated with business education or office management supplied vary-

ing amounts of supporting evidence regarding the utilization of standards. The interviews with business men and the replies to the questionnaire letters furnished data regarding current practices. Recent graduate studies dealing with the status of clerical occupations and standards were also the source of additional information utilized in the study and appraisal.

## **The Findings of the Investigation**

### **Conclusions Pertaining to Origins**

Machine manufacturers and shorthand inventors and publishers exerted a great influence in the popularization of what are now regarded as traditional standards of performance in clerical operations involving typewriting and stenography.

The earliest standards were the short-spurt words a minute standards used to express speed performance in typewriting and in shorthand note-taking.

The earliest standards in typewriting were developed from short artificial tests, demonstrations, and novel performances. The earliest standards in shorthand were nothing more than crude estimates of an "appropriate" rate of speed. The standards were not based on an examination of the office production problems to which the skills were ultimately to be applied.

Since the typewriter manufacturers conducted the first schools for typewriting instruction, their approach to the expression of competency served as the pattern which was then adopted by private business schools and business men for the measurement of skill in both typewriting and stenography.

The inadequacy of the artificial, short-spurt performance as an indicator of ability to perform acceptable service in the office was soon recognized by employers and was also conceded by a few educators.

Some early standards in other clerical operations were developed by business men based on an analysis of their specific situations. But the prominently-mentioned standards were generally derived from survey averages and estimates which were highly unscientific.

From the beginning of the clerical era the employer established qualifications in addition to skill competency. These other requirements included education, experience, physical capacity for work, and personal factors.

## **Conclusions Pertaining to the Developments**

The inadequacy of the short-spurt words a minute standard in typewriting and stenography was almost immediately apparent but corrective action was slow and scattered. The early domination of the typewriter manufacturers and shorthand inventors and publishers waned. In time the continuing deficiency received increased attention first from business men, then from educators, and later from joint groups; but no effective improvements resulted. The short-spurt words a minute standard remains in common use in both the schools and the business world.

Performance standards in other clerical work likewise received additional attention but no significant improvements were accomplished. Standards are still few and are generally of the survey-average type or are limited in usefulness to individual situations.

The failure of business education to keep pace with business needs may be attributed in part to the inadequate preparation of teachers, a condition which has improved only very slowly.

The lagging interest of business educators may also be attributed to their reluctance to recognize the primary vocational aims of the training which they had to offer.

Attempts were made to facilitate the evaluation of other qualifications mainly by the development of appropriate tests. The intelligence test appears to have earned favor as an aid in selection. However, tests of achievement in arithmetic, spelling, and language usage are not yet successful in measuring the ability to apply skills and knowledges to the actual business situation. Personality evaluation remains largely a matter of subjective appraisal. Physical capacity is typically determined by medical examination.

## **Conclusions Pertaining to the Adequacy of Existing Standards**

The popular short-spurt words a minute standard in typewriting and stenography is not a valid indicator of ability to perform on the job because it has insufficient relationship to the job conditions.

The survey-average type of standard commonly cited for other office operations is likewise invalid because it is an average which has little connection with any specific, existing situation, and the figures included in the average are generally no better than estimates.

Existing standards have not typically been developed through the application of scientific methods of investigation such as job analysis and time study.

No universal standards of performance in clerical work have been developed. It is, therefore, impossible to compare standards established in one situation with those derived anywhere else.

The principles of scientific office management are not yet effectively applied in typical business office operations.

The schools characteristically use traditional units to express performance in typewriting and stenography, doubtless due to convenience and objectivity, but there is no uniformity in achievement rate goals among schools.

The basic inadequacy of the standards used by the schools has been further magnified by the apparent dearth of realism in instructional materials and environment and the negligible attention given to the development of working habits.

Standards in current use in the schools stress one separate element of job success—skill. Generally speaking, the schools have overlooked the importance of personality development.

### **Conclusions Pertaining to Apparent Trends**

There are no signs of immediate improvement in the quality of existing standards because even the most recent remedial projects continue to employ unscientific and invalid procedures and assumptions.

The professional and business literature contains increasingly frequent mention of standards, but these characteristically lack specificity or universality of application.

The problem of standards is apparently receiving more attention than ever before from both business men and educators but the participants still represent only a minority. The rank-and-file of both groups have not yet been sufficiently aroused to action.

The satisfactory solution of the standards problem in clerical occupations is not impossible, but a fresh departure is needed—one which will be cognizant of past mistakes rather than one which will perpetuate them.

## **Recommendations for Improvement—Long Range**

The techniques which have been applied to the problem of improving standards up to the present have had a common purpose—to ascertain production as it is in the office. However, it has been shown that business offices are not typically conducted in strict conformity with the principles of scientific management. Since it may be safely surmised, therefore, that offices are generally operating at a much lower level of efficiency than is potentially attainable, should those concerned with setting standards simply accept performance of that caliber as a basis for a system of evaluation?

Is there an approach that is based upon genuine efficiency which would permit the determination of sound training goals and which would provide a degree of comparability not hitherto attained? The "best method" approach is proposed as a means of establishing improved standards of performance in clerical operations using procedures calculated to avoid traditional weaknesses. This approach involves several steps to be undertaken cooperatively by educators and business men: 1) the identification of common, basic clerical operations for which training may appropriately be given in the schools, 2) the application of time and motion studies to each of the basic operations to determine the "best method", 3) the utilization of the job analysis data to establish minimum standards of quality of work in terms of practical acceptability for business purposes, 4) the preparation of a detailed job description listing the characteristics of the "best method", 5) the employment of the job description as the keystone of the organization of school instructional content, equipment, materials, working layout, and working conditions, 6) the use of the minimum standards of quality of performance indicated in the job description as the uniform criteria for appraisal of school work, 7) the development of norms for the evaluation of school achievement from data accumulated over a prolonged period from timed observation of trained students engaged in sustained-interval, "best method" performance of acceptable quality, 8) the development of norms which would contain the maturity and experience elements from data accumulated through similar observation of experienced office workers who have been trained in "best method" procedures for the basic clerical operations, 9) findings would be subjected to periodic review and full details would be made available to schools and business firms.

## **Recommendations for Improvement—for Immediate Use**

### **Recommendations for the Business Man**

The process of selecting office personnel has been generally characterized by informality owing in part to the absence of reliable formal measures which could be applied. Instead, the lack of reliable measures and devices should

be the signal for added caution. Today's selection procedure should employ a number of devices and methods in order to double-check and to compensate in volume for what is lacking in quality of available techniques and measures.

The policy of making the most out of the best available materials necessarily involves a considerable elaboration of the typical selection procedures. A preliminary screening process should include the completion of a short application form, a brief interview, and the administration of pertinent performance tests. This is adequate to weed out those applicants who are obviously unsuited.

The detailed appraisal of the more promising applicants should include additional and lengthy interviews with several different persons. The interviewers' reactions should be verified by the investigation of references. Then the employer seeking to be as thorough as possible should consider a battery of formal tests which would include the evaluation of intelligence, personality, and clerical aptitude as well as the mastery of fundamentals such as English, arithmetic, and spelling. A physical examination should also be included in the appraisal procedure.

Upon completion of the detailed appraisal process the employer will have accumulated a considerable amount of relevant data to help him reach a decision. However, the employment decision should not be regarded as irrevocable. The probationary period should receive more serious consideration. It should be a genuine trial period in which the employee is kept under close observation and the selection should not be regarded as final until the probation has been successfully served.

### **Recommendations for the Teacher**

As in the case of the business man, the best solution to the teacher's immediate problem seems to be to make the best use of available methods and devices and to avoid the obvious pitfalls.

The educator must recognize the short-spurt performance for the artificial measure that it is. With this realization in mind the teacher should employ the traditional tests only in areas where they serve a useful purpose. Once the preliminary instructional period has passed, the educator must emphasize realistic materials in instruction and must develop the ability to perform in a sustained production situation in which appropriate emphasis is directed to working habits, proper selection of materials and equipment, and effective layout. Personal factors should also receive attention in the classroom consistent with the recognized importance of such characteris-

tics in job success. Every mark which the student earns in the advanced stages of training should reflect the adequacy of total performance rather than of skill performance alone.

The business educator should not overlook students' deficiencies in fundamentals. It is a mistake to try to mark the students on their narrow accomplishments within strict subject-matter lines. Admittedly there are limits to remedial measures which the business teacher can take. The further responsibility should be placed squarely before the school administration.

In the absence of reliable instruments for prognosis in business training, the teacher should employ the old but neglected idea of try-out courses to greater advantage. Until a long-range fundamental development such as the "best method" approach is perfected, the only improvement that the educator can reasonably hope for must be the result of his own alertness and ingenuity.

### **Recommendations for Teacher-Training Institutions**

The teachers colleges must assume a more aggressive role in efforts to develop improved standards. In the inevitable process of improvement, greater demands will be made upon the teachers. In anticipation of the more demanding future, institutions for the training of teachers must be more selective in their choice of students and must regard the entire training period as a continuing observation-selection opportunity with the ideals of the profession uppermost in mind. These institutions should hold their students to high standards of mastery of subject matter and fundamentals.

The best way to inculcate the progressive, critical attitude toward standards that is now so sorely needed in the profession is to capture it in the teacher-training instructional situation and consistently to set the example. Teachers colleges must take a lead in the overdue development of the new instructional content which should emphasize the working habits, personal factors, working layout, and sequence of operations features that are vital for the enrichment of present unrealistic and unbalanced instruction. The program of preparation for business teachers should include a course in office management and the requirement of related business experience to provide both theoretical and practical background. Provision should also be made for training in elementary remedial techniques so that the future teacher will be able to do the most for students whose deficiencies are revealed in classroom performance.

With respect to the "best method" approach to the improvement of standards, the teachers colleges must be ready to play a prominent role in the developmental work and in the subsequent popularization of the new materials and procedures.