Survey to determine the need for shorthand skills and the extent to which shorthand is used in selected business firms in Honolulu Hawaii

Amy Toshie Fujii

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CHAPTER I

INTRODUCTION
The Problem and Its Background

Keeping the curriculum of public education up to date is a continuing problem faced by educators. The rapidly changing world of work affects the preparation and training required by employers. Changes in business occupations should be reflected in the business curriculum at the secondary and post-secondary levels. Curriculum changes should be based on the needs of the students and the community which a school system serves.

"Often a legitimate difficulty for the business educator is the lack of current information which describes the preferences of employers."¹ A survey in the area of shorthand has not been conducted in Honolulu, Hawaii; and there is much discussion today as to what the needs of business are regarding shorthand training. There are some educators who feel that there is an over-emphasis on shorthand training in Hawaii and that the trend is toward the increased use of transcribing machines by more businesses which would lessen the need for employees with shorthand skills. On the other hand, others feel that there is a

shortage of workers with the necessary shorthand training.

Kuehler reports:

Mushrooming business is draining Honolulu's secretarial pool. Employers seeking competent secretaries are finding out that they're scarce these days. Hundreds of girls from the Mainland, or fresh out of high school, regularly apply for secretarial jobs, but without training in typing and shorthand, most are considered incompetent.2

These contradictions indicate a need for a realistic evaluation based on actual and current data which can be obtained through a community survey. The community survey can be a desirable aid in establishing performance standards for the business education department or aid in establishing a guidance program based on the knowledge of the jobs available, requirements for these jobs, and the opportunities for advancement.3

Since today's students are demanding relevant education, vocational education must be relevant if it is to serve them. This survey was undertaken to determine whether there should be a decrease in the emphasis on shorthand with more time spent on voice transcription machines, less emphasis on preparing stenographers and more emphasis on preparing clerk-typists with grammar, spelling, and


punctuation skills.

Purposes of the Study

The primary objectives of this study were:

1. To determine the extent to which manual shorthand is being used as compared to machine shorthand and voice transcription equipment from the executive's point of view as well as from the actual experiences of stenographers and secretaries.

2. To identify the trend in shorthand usage for the past five years and the anticipated trend for the next five years.

3. To determine whether there are entry-level stenographic and secretarial positions that do not require experience.

4. To identify the amount and kind of education, training, and experience required of stenographers and secretaries.

5. To determine where businesses obtain most of their stenographers and secretaries and the tests used for their selection.

Delimitations

This study was limited to 170 firms located in the city of Honolulu which were selected from a list of firms representing a cross section of various types of businesses supplied by the Chamber of Commerce of Honolulu.
Assumptions

It was assumed that the answers received to the questions on the questionnaires would provide factual data on the need for shorthand training and the extent to which the skill is being used in offices today.

It was also assumed that the practices of the firms selected would be representative of all businesses in Honolulu who employ stenographers and secretaries.

Definition of Terms

Manual shorthand: Any form of written shorthand using either symbols or alphabets.

Secretary: Person who takes and transcribes dictation, relieves officials of minor administrative and business detail, is more experienced and usually receives a higher salary than a stenographer.

Stenographer: A person who takes and transcribes dictation from one or more individuals as well as performs other clerical duties.

Voice transcription machine: Equipment using tapes or belts for recording dictation for later transcription by clerical personnel.
CHAPTER II

RELATED RESEARCH AND LITERATURE

A Comparison of Shorthand Systems

There are many shorthand systems being taught today throughout our nation. Richards⁴ undertook a study of a comparison of thirteen current shorthand systems by analyzing the systems themselves using Silverthorn's high-frequency word list (1955). His study revealed that approximately 100 words account for 50 per cent of all words in business; that 500 words account for 70 per cent; that 1,000 words account for 80 per cent; and that 5,000 words account for 95 per cent.

Richards hypothesized that basic courses in shorthand are unnecessarily encumbered with words which are rarely used in business communications. This hypothesis was proven to be correct. Not one of the thirteen shorthand systems he studied presents half of the first 1,000 high-frequency words in its first 1,000 words.

Richards also reasoned that students of shorthand would be greatly encouraged to continue their study and mastery of a shorthand system if they could learn quickly

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to write fluently a thousand words which account for 80 per cent of all running words.

Richards' table on page 7 reveals his findings when a comparison was made of the first 500 different words with the first 1,000 words in Silverthorn's list. Although Gregg shorthand is one of the most popular and widely taught systems, it ranks twelfth out of the thirteen systems studied.

Findings on Manual, Symbol Shorthand

A nation-wide survey conducted by Karaim revealed that out of 167 schools replying to his questionnaire, 166, or 99 per cent, taught the Gregg shorthand system.

Karaim found among the shorthand teachers surveyed that 80 per cent of them felt that one year of shorthand for beginning stenographic positions was insufficient. Seventy-three per cent of the schools offered two years of shorthand in their curriculum.

Karaim's study also revealed that only 6 per cent of the teachers thought that the demand for shorthand trained personnel in business is decreasing. Ninety-four per cent believed the demand was staying at about the same level or

---


6William J. Karaim, "Conflicting Opinions of Teachers Concerning the Status Quo of Shorthand" (unpublished M.S. thesis, University of North Dakota, 1960.)
A Comparison of the First 500 Different Words in 13 Shorthand Systems with the First 1,000 Words in Silverthorn's List

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<th>Rank</th>
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<th>Words common to Silverthorn's first 500 words</th>
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<th>Words common to Silverthorn's first 1,000 words</th>
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<tr>
<td>1</td>
<td>Rapid Writing</td>
<td>222</td>
<td>73</td>
<td>295 (59.0%)</td>
</tr>
<tr>
<td>2</td>
<td>Hy-Speed</td>
<td>214</td>
<td>71</td>
<td>285 (57.0%)</td>
</tr>
<tr>
<td>3</td>
<td>Stenoscript</td>
<td>182</td>
<td>56</td>
<td>238 (47.6%)</td>
</tr>
<tr>
<td>4</td>
<td>Shortrite</td>
<td>193</td>
<td>43</td>
<td>236 (47.2%)</td>
</tr>
<tr>
<td>5</td>
<td>Forkner</td>
<td>170</td>
<td>64</td>
<td>234 (46.8%)</td>
</tr>
<tr>
<td>6</td>
<td>Stenotype</td>
<td>178</td>
<td>56</td>
<td>234 (46.8%)</td>
</tr>
<tr>
<td>7</td>
<td>Speedwriting</td>
<td>160</td>
<td>71</td>
<td>231 (46.2%)</td>
</tr>
<tr>
<td>8</td>
<td>Pitman</td>
<td>152</td>
<td>74</td>
<td>226 (45.2%)</td>
</tr>
<tr>
<td>9</td>
<td>Briefhand</td>
<td>175</td>
<td>45</td>
<td>220 (44.0%)</td>
</tr>
<tr>
<td>10</td>
<td>Stenospeed</td>
<td>162</td>
<td>50</td>
<td>212 (42.4%)</td>
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<tr>
<td>11</td>
<td>Thomas</td>
<td>168</td>
<td>39</td>
<td>207 (41.4%)</td>
</tr>
<tr>
<td>12</td>
<td>Gregg</td>
<td>135</td>
<td>67</td>
<td>202 (40.4%)</td>
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<tr>
<td>13</td>
<td>Quickhand</td>
<td>108</td>
<td>44</td>
<td>152 (30.4%)</td>
</tr>
</tbody>
</table>

even increasing.

An increase in shorthand enrollment was experienced by 54 per cent of the teachers and 24 per cent found their enrollments remaining about the same.

Zoubek asked businessmen why they insist on shorthand writers as stenographers and secretaries. Here are some of the answers he received:

They are loath to use a dictating machine.

Even though today's machines are quite simple to operate, many businessmen are not willing to take the time to learn how to use the machine and how to dictate so that the transcriber can turn out a satisfactory transcript in a reasonable length of time.

They prefer to dictate to a shorthand writer because they can make changes, insertions, and deletions in their dictation more easily and quickly than they can on a dictating machine.

They prefer to dictate to a shorthand writer because the stenographer can supply information, prices, dates, etc., information that the businessman would have to hunt up for himself if he were dictating to a machine. Furthermore, the stenographer can often catch mistakes in grammar or in facts before transcription is started.

They have difficulty obtaining and holding machine transcribers; girls find machine transcription tedious.

In some companies, they cannot pay dictating machine operators as much as they pay stenographers and secretaries.

In his study of the use of shorthand in Minnesota,

Lawrence\(^9\) obtained data from the office employees, public and private employment agencies, and the help-wanted sections of newspapers. He found that among the office workers, the more shorthand instruction received, the more likely that the skill would be used on the job. He also found that more employees received their shorthand training on the "high school only" level than on the post high school level.

Lawrence noted that the higher the shorthand grade and the high school English grade received, the higher the percentage of office workers who used their shorthand.

Data provided by employment agencies for this survey indicated that 45.2 per cent of the requests received were for office workers with shorthand skills, and only 57.9 per cent of these requests were filled.

Of the want-ads considered, 26.2 per cent were for workers with shorthand ability.

Audrey Schmidt, the educational director of Gregg magazines, states that the training of students to be secretaries must be more comprehensive than it has been in the past and should include information on data processing, the use of various copying machines, and other current information which was not considered essential ten or even five

\(^9\)Richard E. Lawrence, "The Use of Shorthand by Office Workers in Certain Minnesota Businesses with Implications for the High School Teacher" (unpublished M.S. thesis, Mankato State College, 1962.)
years ago. However, she further states that good shorthand and typing skills are still the basic tools of the trade so far as the beginning secretary is concerned.

Findings on Manual, Alphabet Shorthand

Some of the systems of abbreviated longhand in use today are Forkner, Alphabetic Shorthand, Hy-Speed Longhand, Rapid Writing, Speedwriting, Briefhand and Stenoscript.

A study conducted in New York in 1967\(^{10}\) produced 550 writers of abbreviated longhand in 98 firms. Although the number of writers using abbreviated longhand is well under 10 per cent, Herbert A. Tonne states that a clear trend is evident. The respondents were satisfied with the work of the users of abbreviated longhand and felt that the promotional opportunities were about equal to those of manual, symbol stenographers.

Perkins\(^{11}\) reports that the Hughes Aircraft Company found the Stenoscript Alphabet Shorthand to be the most effective tool for its time and money and served its purposes to the best advantage.

The course offered at Hughes ran for an eleven-week period, meeting twice a week for one and one-half hour sessions, as part of the On-Premise Training Program to


offset the shortage of competent stenographers. At the end of these thirty-three class hours, 95 per cent of the students were able to qualify for the Hughes stenographic rating of accurately transcribed dictation at 80 words a minute. Many of the students achieved higher speeds, although none to date have surpassed 110 words a minute.

Perkins states that the number of students requesting Stenoscript shorthand has doubled at Hughes and more classes are being planned for the future.

According to Perkins, it is the time and cost factors which probably account for Stenoscript shorthand's increasing popularity. Thirty-three to forty-five hours of class instruction are all that is necessary to master the system. A single text is required, and the text contains the theory, in only seven lessons, dictation, exercises, and vocabulary lists.

Another study made of an abbreviated shorthand system was conducted by Smith\(^\text{12}\) of Forkner shorthand. Smith's experimental research compared the achievements of high school students in Forkner Alphabet shorthand and in Gregg (Diamond Jubilee) shorthand during the 1965-66 school year. A total of 536 students—234 Forkner students and 302 Gregg students—participated. Eighteen schools, eight Forkner

schools and ten Gregg schools, located throughout the United States were used.

The students in each system were grouped into three classifications according to grade-point average. On a four-point basis, students were classified as follows: Above-average, 3.00 and above; average, 2.00 to 2.99; below-average, 1.99 and below.

Smith concluded from his experimental study that an analysis of four factors—system, speed, grade-point average and set—indicated that the Forkner students performed better than did the Gregg students regardless of the manner of comparison. The difference in achievement was significant in favor of the Forkner group.

Other conclusions of this study were: The Forkner shorthand system is easier to learn, is superior to Gregg (DJ) shorthand system for a one-year shorthand course, and is better adapted for all grade-point average groups.

Findings on Machine Shorthand

Manos made a comparative study between pen and machine shorthand in Southern California. He surveyed 21 businessmen, 39 stenotype graduates, and 58 university graduates of the secretarial program. The advantages he cites for machine shorthand are: (1) Speed. Operators write

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automatically, by touch, their speed comes more easily on the machine because the operator is not concerned with which way the characters must be written, nor is he concerned with the legibility of his handwriting. Words and groups of words are written with a single stroke. (2) Accuracy. Notes never get cold and can be exchanged and transcribed by another machine shorthand writer. (3) Ease. Because of the touch system, the machine operator writes automatically. The employer can dictate for longer period. (4) Psychological advantage. Students tend to show more interest in learning the machine way because of their interest in the machine itself and because their skill seems to grow much more rapidly.

Among the disadvantages Manos found with machine shorthand were: (1) The necessity of moving the machine each time the operator must take dictation. (2) Increase in cost of paper and additional supplies connected with the machine and its maintenance. (3) Operation of the machine itself was also considered a disadvantage.

In Manos' study, businessmen were asked to indicate their opinions of machine shorthand as "favorable, unfavorable, or no opinion." In favor of the machine shorthand system were 66.7 per cent of the 15 firms responding. However, 73.4 per cent of these employers were not willing to furnish machines for their secretaries with machine shorthand ability. This means that a secretary would have to
supply her own machine, which would be a limitation to the incorporation of a machine course in the public school curriculum.

Manos included in his study a survey conducted in Newark, New Jersey, under the direction of Raymond C. Goodfellow, Director of the Business Education Department. The study, "The Stenograph Versus Pen Shorthand" covered a two-year period from September 1952 to June 1954. He quotes from Goodfellow that:

It is my considered judgment that the enrollment in pen shorthand will continue to decline and that within the next ten years the subject will entirely disappear from the high school curriculum. It will be replaced with the Stenograph or other types of dictating equipment, of which there are over 150 different devices at the present time used in place of pen shorthand.

Ruegg, 14 a business educator, who taught manual shorthand for over 15 years reports that he made the transition to teaching machine shorthand without too much difficulty because of the similarities in theory between the manual shorthand and the keyboard system.

The basic difference, according to Ruegg, is that the machine shorthand students begin their first day by placing their hands on the shorthand machine keyboard. Another difference mentioned was that there are no special word beginnings in the machine shorthand system and only five word endings to learn.

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Ruegg reports that the recommended teaching procedures for machine shorthand are almost identical in their approaches to dictation, brief-form drills, note-reading and transcription to manual shorthand. Since he found nothing contrary to his basic training as a shorthand teacher, he was confident he could learn to teach machine shorthand in a relatively short period of time.

Tonne\(^\text{15}\) reports on a survey made in 1967 of 267 offices in New York which revealed that 175 stenographers using machine shorthand were employed in forty firms. Machine shorthand operators, however, did not obtain jobs as readily as manual stenographers because not a single firm was found to have bought a machine for the prospective machine stenographer.

**Findings on Voice Transcription Machines**

Much is being said today about the increasing use of transcribing machines, also commonly called dictating machines, replacing shorthand. Kopitzke\(^\text{16}\) in her study identified as the three major advantages of using transcribing equipment: (1) time saver for both dictator and transcriber; (2) great convenience for businessmen who

\(^{15}\) Tonne, "Is Shorthand Changing?," pp. 52-53.

\(^{16}\) Irma Jean Kopitzke, "A Survey to Determine the Extent Transcribing Machines are Used in Business Communications as Compared to Shorthand in the Madison and Milwaukee Areas" (unpublished M.S. thesis, University of Wisconsin, 1953.)
travel a good deal; and (3) faster and more accurate. The disadvantage of using transcribing equipment were:
(1) transcribing equipment lacks the personal touch;
(2) the initial cost is high; and (3) it is difficult to transcribe if the enunciation is not distinct.

Kopitzke found that the average length of time required to prepare an individual to dictate with a reasonable amount of efficiency on the dictating machine is from 3 to 6 weeks. The average length of time required to prepare an individual to transcribe with a reasonable amount of efficiency from the machine is from 2 to 4 weeks.

Kopitzke's study also indicated that of the 162 Madison and Milwaukee returns, 101 stated that pre-service training should be given in the use of dictating equipment and 126 of the 162 returns reported that pre-service training should be given in the use of transcribing machines.

A study made of Steele County, Minnesota by Colvin revealed that of the 31 firms responding to his questionnaire, 67.7 per cent reported that they used transcription machines in their offices. Of the 34 clerical office workers with shorthand training, 41.2 per cent reported that they used transcription machines on their jobs.

Among the findings of the study made by Biggers\textsuperscript{18} on the status of shorthand and voice transcription machines for the Columbia, Ohio, area, the percentage of firms and employees surveyed as using shorthand for dictation decreased from 83 and 71 per cent (1946) to 81 and 70 per cent (1956) and to 76 and 66 per cent (1969)\textsuperscript{1}.

The percentage of employees using voice transcription machines remained nearly the same from 27 per cent (1946) to 26 per cent (1956) and increased to 48 per cent between 1956 and 1969. However, the percentage of firms using voice transcription machines increased from 37 per cent (1946) to 58 per cent (1956) and remained nearly the same, 57 per cent, between 1956 and 1969.

Biggers' also found that the percentage of firms using shorthand exclusively decreased each year (1946, 50 per cent; 1956, 27 per cent; 1969, 22 per cent.) The percentage using shorthand with a combination of other media increased (1946, 33 per cent; 1956, 54 per cent; 1969, 59 per cent.)

\textbf{Summary of Related Research and Literature}

The shorthand systems in current use when compared with Silverthorn's high-frequency word list do not present

\textsuperscript{18}Bevery A. Biggers, "The Status of Shorthand and Recording Machines Used for Dictation in Representative Business Firms in Columbia, Ohio, in 1969" (unpublished M.A. thesis, Ohio State University, 1969.)
the most frequently used words early enough. Students of shorthand would be more likely to continue their study and mastery of a shorthand system if they could learn quickly to write fluently the thousand words which account for 80 per cent of all running words used in business communications.

Advantages and disadvantages can be cited for manual shorthand systems, using symbols or alphabets, machine shorthand, as well as voice transcription machines as mediums for recording dictation.

Because Gregg shorthand, a symbol shorthand, has become established as a predominant system in the United States, other systems have not been readily accepted.

Machine shorthand and abbreviated longhand systems can provide vocational shorthand skills in less time and should be considered where time limitation is an important factor.

Since the recommended teaching procedures for machine shorthand are almost identical with the approaches to manual shorthand, shorthand teachers could learn to teach machine shorthand in a relatively short period of time. However, a strong factor against beginning such a program in the high schools has been the unwillingness of companies to purchase shorthand machines for shorthand machine operators.

There is a growing trend among businesses to employ
stenographers and secretaries with abbreviated longhand skills. The opportunity for employment seems to be equal between abbreviated longhand writers and symbol shorthand writers.

The use of transcribing machines for dictation is on the increase according to the studies mentioned in this chapter. The average length of time required to prepare an individual to transcribe from the machine is from 2 to 4 weeks. The average length of time required to prepare an individual to dictate is from 3 to 6 weeks.

Changes in the methods of taking dictation are definitely taking place. However, no study as yet confirms the complete elimination of any one method of recording dictation. Changes are occurring at different rates in different parts of the country. The greatest changes seem to be taking place in areas where there is a shortage of qualified stenographers and secretaries and where businesses have been unable to fill their needs.
CHAPTER III

METHODS AND PROCEDURE OF RESEARCH

Setting of the Study

The city of Honolulu is located on Oahu, the capital island of the Hawaiian chain. According to the 1970 Census report, 629,176 people reside on Oahu out of the total state population of 768,561.19

Honolulu was selected for this study because it is where 93 per cent of Oahu's population reside and work.20

Honolulu is the seat of both State and City and County governments.

It serves as the financial center of the State; and as such, with few exceptions, all financial institutions in the State have their main offices here.

Honolulu also serves as the major transportation terminus in the state for overseas passengers and has the largest concentration of visitor facilities in Waikiki.

Employment in the Area

Employment presents a distinct departure from national

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20Ibid.
trends. Government continues to be the largest employer followed by wholesale and retail trades, service and manufacturing. Nationally, manufacturing provides employment for more persons than any other major industry. On Oahu, it ranks fourth. In Hawaii's service-oriented economy, tourism is the State's fastest growing industry.

Stenographic positions available under Federal, State and local civil service all require proficiency in the use of shorthand. Eighty words per minute is the minimum dictation speed for entry-level government positions.

The Recruitment and Placement Officer of the City and County government of Honolulu reports that 76-99 per cent of the stenographers and secretaries in its employ use only manual shorthand.22

One Federal office in Honolulu which was contacted reports that 100 per cent of its stenographers and secretaries use manual shorthand exclusively.23

Scope of the Survey

The survey was conducted for the City of Honolulu and

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22City and County of Honolulu, Department of Civil Service, Recruitment and Placement Supervisor, December, 1970.

included 170 firms from the following industries:

1. Agriculture
2. Communications
3. Construction
4. Diversified
5. Finance
6. Insurance
7. Manufacturing (food, apparel, printing)
8. Real Estate
9. Service (hotels, health, professional, education and recreation)
10. Trades (wholesale, retail, restaurants)
11. Transportation
12. Utilities

The survey attempted to determine from management's point of view:

1. Whether students who acquire shorthand skills use them on their jobs.

2. What per cent of stenographers and secretaries use only manual (written) shorthand or only machine shorthand for dictation.

3. What per cent of a firm's clerical personnel use only a voice transcription machine.

4. What per cent of stenographers and secretaries use manual or machine shorthand part of the time and voice transcription machines the other part of the time.

5. What dictation method is most and least preferred by executives.

6. Whether stenographers and secretaries are expected to compose letters.

7. What the minimum educational levels are for stenographers and secretaries.

8. Whether there are entry-level stenographic and secretarial positions that do not require experience; if not, how much and what kind of experience are required.

9. What tests are used for the selection of stenographers and secretaries.

10. Where firms obtain most of their personnel for stenographic and secretarial work.
11. Whether there is any unfilled need for stenographers or secretaries with shorthand training at the present time.

12. Whether there has been an increase or decrease in the employment of workers with shorthand training within the past 5 years.

13. What the anticipated trend is in the employment of workers with shorthand training for the next 5 years and the cause for this trend.

The study also surveyed stenographers and secretaries in an attempt to determine:

1. What the educational level is of those who are presently employed.

2. What kind and amount of shorthand training they have had.

3. The extent to which they use their shorthand skill for dictation.

4. The extent to which they transcribe from voice transcription machines.

5. Whether they compose original letters.

6. Whether there has been an increase or decrease in the use of their shorthand skills in the past 5 years.

7. What the anticipated trend is in the use of their shorthand skill in the next 5 years and the reason for this trend if it is a decrease.

Since data on salaries paid stenographers and secretaries in the State were available from other sources, this question was not included in the survey.

Clerk-stenographers in the State in 1967 received a minimum salary of $245 to a maximum of $611 in private industry while secretaries earned a minimum of $250 to a
maximum of $682 a month. The average minimum salary for clerk-stenographers was $339 a month with the average maximum at $464; the average minimum salary for secretaries was $409 with the average maximum at $558.25

A bi-monthly publication of the State's Department of Labor and Industrial Relations for September, 1970 reports that salaries being offered to stenographers in Honolulu ranged from $275 to $400; to secretaries, $300 to $550+.26

Through surveying both management and stenographers and secretaries, it was hoped that this study would provide a more accurate picture of the need and use of shorthand in the firms selected for this study.

Collection of Data

The questionnaire method was selected as the medium for collecting data for this study.

Two questionnaires were developed—one to be filled out by the personnel manager entitled, "A Survey of Business to Determine the Need for Shorthand Skills and the Extent to which Shorthand is Used in Selected Businesses in Honolulu, Hawaii" (see Appendix B) and another to be


25 Ibid., p. 133.

filled out by a stenographer or secretary who uses manual shorthand, "A Survey of Stenographers/Secretaries to Determine the Extent to which Shorthand is Used in Selected Businesses in Honolulu, Hawaii" (see Appendix C). The selection of manual shorthand users was specified to complete the second questionnaire because it is the only method of shorthand taught in all public high schools in the school district of Honolulu and responses from these people would be more meaningful in relation to the present curriculum.

Prior to issuance, the proposed questionnaires were examined by an officer of an organization that conducts managerial research and the director of business education research at the University of Hawaii. Several of their suggestions were incorporated into the questionnaires.

Both questionnaires were mailed out with a cover letter (see Appendix A). Two weeks after the due date, firms which had not responded were recontacted by telephone, and duplicate copies of the questionnaires were sent if requested.
CHAPTER IV

FINDINGS OF THE STUDY

One hundred seventy firms were sent the questionnaire, "A Survey of Business to Determine the Need for Shorthand Skills and the Extent to Which Shorthand is Used in Selected Businesses in Honolulu, Hawaii," to be completed by personnel managers. These same firms were also sent the questionnaire, "A Survey of Stenographers/Secretaries to Determine the Extent to Which Shorthand is Used in Selected Businesses in Honolulu, Hawaii," to be completed by a stenographer or secretary.

There were 117 companies returning one or both questionnaires for a 68 per cent return. The 117 returns include:

- Completing and returning both questionnaires .................. 86 firms
- Completing and returning only the questionnaire sent to personnel managers ....................... 6 firms
- Completing and returning the questionnaire completed by a stenographer or secretary .................. 3 firms
- Returning both questionnaires blank ........ 22 firms

Total 117 firms

Table 1 on page 27 shows the twenty-two companies that returned blank questionnaires by industries and the reasons
### TABLE 1

**22 FIRMS BY INDUSTRIES WHICH RETURNED BLANK QUESTIONNAIRES AND THEIR REASONS FOR NOT COMPLETING THE QUESTIONNAIRES**

<table>
<thead>
<tr>
<th>Type of Industry</th>
<th>No. of Returns</th>
<th>Reasons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Communications</td>
<td>2</td>
<td>Both are foreign language newspapers and do not use shorthand.</td>
</tr>
<tr>
<td>2. Construction</td>
<td>1</td>
<td>No stenographer or secretary employed.</td>
</tr>
<tr>
<td>3. Financial</td>
<td>4</td>
<td>Three companies employ no stenographer or secretary; one uses very little shorthand—Gregg manual.</td>
</tr>
<tr>
<td>4. Diversified</td>
<td>1</td>
<td>Shorthand skills not needed; all letters are handwritten and then typed.</td>
</tr>
<tr>
<td>5. Insurance</td>
<td>1</td>
<td>No stenographer or secretary employed; no shorthand used.</td>
</tr>
<tr>
<td>6. Manufacturing</td>
<td>5</td>
<td>Three companies employ no stenographer or secretary; one used part-time stenographers but required no shorthand; one company used its receptionist to type letters written in longhand.</td>
</tr>
<tr>
<td>7. Service</td>
<td>3</td>
<td>Two firms employed no stenographer or secretary; one hired part-time stenographers as needed with manual shorthand skills.</td>
</tr>
<tr>
<td>8. Trades</td>
<td>4</td>
<td>All these companies used no shorthand. The personnel interviewer handled correspondence through oral instructions or longhand rough drafts for one company.</td>
</tr>
<tr>
<td>9. Transportation</td>
<td>1</td>
<td>No shorthand used as correspondences are handled through main office in N.Y.</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>22</strong></td>
<td></td>
</tr>
</tbody>
</table>
given for not answering any of the questions on the questionnaires. The 22 firms represented 13 per cent of the 170 included in this survey study.

There were no basic differences between the firms that responded and those that did not as to type of industry or size of the company. Some of the reasons given by firms for not returning the questionnaires were:

1. Too busy.

2. Questionnaires were passed along to other personnel for completion and not returned.

3. Since the company is small, did not think its return would make any difference in the study.

4. There had been no turnover in their secretarial personnel for a number of years and no vacancy is expected in the near future.

**Questionnaire Sent to Personnel Managers**

There were 92 questionnaires returned by personnel managers or their designate. Responses were received from all industries included in the survey.

The number of stenographers and secretaries employed by these firms ranged from 1 to 125. The company employing 125 stenographers/secretaries is a company with subsidiaries engaged in land utilization and property management, construction, dredging, ship building and repair, oceanographic engineering, paving and quarry services, industrial merchandising, etc. A total of 975 stenographers and secretaries were employed by firms who responded to this questionnaire.

Table 2 on page 29 shows the number and per cent of
firms responding to the questionnaire by industries. The largest per cent of replies was from the trades with 18 returns. This is 19.6 per cent of the total returns. Service followed with 15, or 16.3 per cent; followed by manufacturing with 13 returns, or 14.1 per cent. These industries with the largest per cent of returns are the three industries which rank as the leading areas of private employment as reported in Honolulu's Manpower Outlook, 1965-70, prepared by the State's Department of Labor and Industrial Relations (June 1969).

### TABLE 2

NUMBER AND PER CENT OF FIRMS RESPONDBING TO THE QUESTIONNAIRE SENT TO PERSONNEL MANAGERS AND PERCENTAGE OF EMPLOYMENT BY INDUSTRIES

<table>
<thead>
<tr>
<th>Type of Industry</th>
<th>No. of Responses</th>
<th>Per Cent of Total Returns</th>
<th>Per Cent of Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Agriculture</td>
<td>1</td>
<td>1.1</td>
<td>1.5</td>
</tr>
<tr>
<td>2. Communications</td>
<td>2</td>
<td>2.2</td>
<td>2.4</td>
</tr>
<tr>
<td>3. Construction</td>
<td>3</td>
<td>3.3</td>
<td>1.1</td>
</tr>
<tr>
<td>4. Diversified</td>
<td>11</td>
<td>12.0</td>
<td>32.1</td>
</tr>
<tr>
<td>5. Financial</td>
<td>11</td>
<td>12.0</td>
<td>16.2</td>
</tr>
<tr>
<td>6. Insurance</td>
<td>4</td>
<td>4.3</td>
<td>3.2</td>
</tr>
<tr>
<td>7. Manufacturing</td>
<td>13</td>
<td>14.1</td>
<td>8.2</td>
</tr>
<tr>
<td>8. Real Estate</td>
<td>5</td>
<td>5.4</td>
<td>3.7</td>
</tr>
<tr>
<td>9. Services</td>
<td>15</td>
<td>16.3</td>
<td>13.2</td>
</tr>
<tr>
<td>10. Trades</td>
<td>18</td>
<td>19.6</td>
<td>12.1</td>
</tr>
<tr>
<td>11. Transportation</td>
<td>7</td>
<td>7.6</td>
<td>4.7</td>
</tr>
<tr>
<td>12. Utilities</td>
<td>2</td>
<td>2.2</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>92</strong></td>
<td><strong>100.1</strong></td>
<td><strong>99.9</strong></td>
</tr>
</tbody>
</table>

Table 2 also shows the per cent of stenographers and secretaries employed by industries. Diversified industries employ the most with 32.1 per cent, followed by financial
firms with 16.2 per cent and services, 13.2 per cent.

Table 3 indicates the number and per cent of firms by size of their stenographic and secretarial staff who responded to the questionnaire. It reveals that 45 firms, or 48.9 per cent, of the firms surveyed employed between one and five stenographers/secretaries and 14, or 15.2 per cent, of the firms employed between six to ten stenographers/secretaries, which is more than 50 per cent of the responses. If the size of the stenographic and secretarial personnel were used as a measure of the size of a company, it would seem that many of the firms in Honolulu are relatively small.

**TABLE 3**

<table>
<thead>
<tr>
<th>No. of Stenographers and Secretaries Employed</th>
<th>No. of Responses</th>
<th>Per Cent of Total Returns</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 5</td>
<td>45</td>
<td>48.9</td>
</tr>
<tr>
<td>6 to 10</td>
<td>14</td>
<td>15.2</td>
</tr>
<tr>
<td>11 to 15</td>
<td>10</td>
<td>10.9</td>
</tr>
<tr>
<td>16 to 20</td>
<td>8</td>
<td>8.7</td>
</tr>
<tr>
<td>21 to 25</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td>26 to 30</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td>31 to 40</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td>41 to 50</td>
<td>2</td>
<td>2.2</td>
</tr>
<tr>
<td>51 to 60</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td>61 to 70</td>
<td>2</td>
<td>2.2</td>
</tr>
<tr>
<td>71 to 125</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td>No Response</td>
<td>6</td>
<td>6.6</td>
</tr>
<tr>
<td>Total</td>
<td>92</td>
<td>100.1</td>
</tr>
</tbody>
</table>
To the question, "Is it possible to determine what per cent of your clerical employees have had shorthand training?", the following replies were received:

No .................. 29 (31.5 per cent)
Yes .................. 38 (41.3 per cent)
Incomplete or No Response. 25 (27.2 per cent)
Total ................ 92 (100.0 per cent)

Of the 38 firms, or 41.3 per cent answering "Yes," 19 indicated that 100 per cent of their personnel with shorthand training were employed in stenographic or secretarial positions. Nineteen other firms replied that there were personnel with such training in their firms who were not using their skills on their present jobs.

The answers to this question seem to imply that employers are primarily interested in filling positions with persons who have had shorthand training because they consider them to be better prepared employees. This may result in underemployment, especially at the entry level. Promotion, of course, is a possibility for the employees not now using their shorthand skills.

The "No," Incomplete, and No Responses would also imply that statistics in this particular area are not readily available.

The findings of the remainder of the questions, which were in the form of a check list, are presented in the order in which they were listed on the questionnaire.
"What per cent of your stenographers and secretaries use only manual (written) shorthand for dictation?"

The tabulated responses to this first question are presented in Table 4 below. It shows the number and per cent of firms whose secretaries/stenographers use only manual (written) shorthand.

**TABLE 4**

NUMBER AND PER CENT OF USAGE OF ONLY MANUAL (WRITTEN) SHORTHAND FOR DICTATION BY PERCENTAGE OF USE

<table>
<thead>
<tr>
<th>Per Cent of Usage</th>
<th>No. of Responses</th>
<th>Per Cent of Total Returns</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>29</td>
<td>31.5</td>
</tr>
<tr>
<td>76 - 99</td>
<td>22</td>
<td>23.9</td>
</tr>
<tr>
<td>51 - 75</td>
<td>3</td>
<td>3.3</td>
</tr>
<tr>
<td>50</td>
<td>7</td>
<td>7.6</td>
</tr>
<tr>
<td>26 - 49</td>
<td>5</td>
<td>5.4</td>
</tr>
<tr>
<td>1 - 25</td>
<td>21</td>
<td>22.8</td>
</tr>
<tr>
<td>No Response</td>
<td>5</td>
<td>5.4</td>
</tr>
<tr>
<td>Total</td>
<td>92</td>
<td>99.9</td>
</tr>
</tbody>
</table>

Twenty-nine firms, or 31.5 per cent, of the companies checked that only manual (written) shorthand was used for all of its dictation with 22, or 23.9 per cent, indicating its use for 76 to 99 per cent of their dictation. Less than 25 per cent usage ranked third with 21, or 22.8 per cent, of the companies checking this category.

With the exception of the five companies not answering
this question, all companies indicated some use of manual (written) shorthand for dictation.

"What per cent of your stenographers and secretaries use only machine shorthand for dictation?"

To this second question, the following responses were received:

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Used for less than 25 per cent of its dictation</td>
<td>52</td>
<td>56.5%</td>
</tr>
<tr>
<td>None</td>
<td>38</td>
<td>41.3%</td>
</tr>
<tr>
<td>No Response</td>
<td>2</td>
<td>2.2%</td>
</tr>
<tr>
<td>Total</td>
<td>92</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Fifty-two companies, or 56.5 per cent, replied that machine shorthand only was used for less than 25 per cent of their dictation. Thirty-eight, or 41.3 per cent, reported no use of machine shorthand.

These figures may reflect the fact that machine shorthand is not taught in the public schools in Honolulu. Those who acquire this skill probably do so at private business colleges in Hawaii or receive their training elsewhere.

"What per cent of your clerical personnel use only a voice transcription machine?"

To this third question, 58 companies, or 63.0 per cent, responded that voice transcription machines were used for less than 25 per cent of their dictation. There were 22 companies, or 24.2 per cent, which reported no use of voice transcription machines. These percentages indicate that voice transcription machines are not being used to a great
extent among the firms surveyed. It may also indicate that executives are unwilling to take the time to perfect their techniques in working with a piece of equipment. The results of this question are presented in Table 5.

TABLE 5

NUMBER AND PER CENT OF USAGE OF ONLY TRANSCRIPTION MACHINES FOR DICTATION BY PERCENTAGE OF USE

<table>
<thead>
<tr>
<th>Per Cent of Usage</th>
<th>No. of Responses</th>
<th>Per Cent of Total Returns</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 ...</td>
<td>3</td>
<td>3.3</td>
</tr>
<tr>
<td>76 - 99 ...</td>
<td>2</td>
<td>2.2</td>
</tr>
<tr>
<td>51 - 75 ...</td>
<td>0</td>
<td>..</td>
</tr>
<tr>
<td>50 ...</td>
<td>3</td>
<td>3.3</td>
</tr>
<tr>
<td>26 - 49 ...</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td>1 - 25 ...</td>
<td>58</td>
<td>63.0</td>
</tr>
<tr>
<td>0 ...</td>
<td>23</td>
<td>25.0</td>
</tr>
<tr>
<td>No Response ...</td>
<td>2</td>
<td>2.2</td>
</tr>
<tr>
<td>Total</td>
<td>92</td>
<td>100.1</td>
</tr>
</tbody>
</table>

"What per cent of your stenographers and secretaries use a voice transcription machine part of the time and take dictation by written or machine shorthand the other part of the time?"

The responses to this fourth question revealed that 41 respondents, or 44.5 per cent, used voice transcription machines part of the time and written or machine shorthand the other part of the time for less than 25 per cent of their dictation. The results of this question are presented in Table 6 on page 35.
From these responses, it can be concluded that only manual (written) shorthand is used more frequently than only machine shorthand, only voice transcription machines, or voice transcription machines part of the time and written or machine shorthand the other part of the time for dictation.

Table 7 on page 36 summarizes the findings according to the methods of dictation used for more than 75 per cent of a firm's dictation.

Among fifty-one firms, or 55.4 per cent, the use of manual shorthand was the predominant method. Twelve firms, or 13.1 per cent, used transcription machines along with
TABLE 7
SUMMARY OF EACH METHOD OF DICTATION USED FOR MORE THAN 75 PER CENT OF DICTATION

<table>
<thead>
<tr>
<th>Method</th>
<th>No.</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manual (written)</td>
<td>51</td>
<td>55.4</td>
</tr>
<tr>
<td>Machine shorthand</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transcription machines</td>
<td>5</td>
<td>5.5</td>
</tr>
<tr>
<td>Transcription machines and manual or machine shorthand</td>
<td>12</td>
<td>13.1</td>
</tr>
<tr>
<td>Total</td>
<td>68</td>
<td>74.0</td>
</tr>
</tbody>
</table>

manual or machine shorthand. Only 5 companies, or 5.5 per cent, reported the use of transcription machines as their most dominant method.

A total of 68 businesses, or 74.0 per cent, indicated that among the methods included in this study, one was used for more than 75 per cent of its dictation.

"Which dictation method is most preferred by your executives?"

"Which dictation method is least preferred by your executives?"

Table 8 on page 37 summarizes the responses to questions 5 and 6, the dictation methods most and least preferred by executives. Table 8 shows that 55, or 59.8 per cent, preferred manual (written) shorthand and 12, or 13.0 per cent, least preferred machine shorthand.

The use of voice transcription machines for dictation was preferred by 11, or 12.0 per cent, of the respondents, with an equal number indicating that this was the least
TABLE 8

DICTATION METHODS MOST AND LEAST PREFERRED BY EXECUTIVES BY NUMBER AND PER CENT OF FIRMS

<table>
<thead>
<tr>
<th>Method</th>
<th>Most Preferred</th>
<th>Least Preferred</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. Per Cent</td>
<td>No. Per Cent</td>
</tr>
<tr>
<td>Manual (written) shorthand</td>
<td>55 59.8</td>
<td>5 5.4</td>
</tr>
<tr>
<td>Machine shorthand</td>
<td>.. ..</td>
<td>12 13.0</td>
</tr>
<tr>
<td>Voice transcription machines</td>
<td>11 12.0</td>
<td>11 12.0</td>
</tr>
<tr>
<td>Manual or machine shorthand</td>
<td>2 2.2</td>
<td>.. ..</td>
</tr>
<tr>
<td>Manual or transcription machines</td>
<td>2 2.2</td>
<td>.. ..</td>
</tr>
<tr>
<td>No Preference</td>
<td>18 19.6</td>
<td>49 53.3</td>
</tr>
<tr>
<td>No Response</td>
<td>4 4.3</td>
<td>15 16.3</td>
</tr>
<tr>
<td>Total</td>
<td>92 100.1</td>
<td>92 100.0</td>
</tr>
</tbody>
</table>

preferred method. Of the 73 firms using transcription machines for some dictation (less than 25 to 100 per cent,) 12 companies indicated that this was the preferred method. Eleven companies also indicated that this was the least preferred method. This would seem to imply that there are mixed feelings at the present time toward the use of transcription machines.

"No Preference" for the preferred method was checked by 18 firms while 49 firms checked this category for the least preferred method. Employers had a more definite feeling about what they liked compared to what they did not like.
"Are your stenographers expected to compose letters under the direction of supervisors?"

To this question, the following responses were checked:

- Yes ........... 44 (47.8 per cent)
- Occasionally .. 6  (6.5 per cent)
- No ............ 38 (41.3 per cent)
- No Response .. 4  (4.3 per cent)

Total 92 (99.9 per cent)

These responses indicate that a majority of employers expect their stenographers to be able to compose letters, but there are still positions in which many stenographers are not expected to do so. This appears to mean, however, that a student who is trained to do some composing would be better qualified to meet the requirements of prospective employers.

"Are your secretaries expected to compose letters on their own initiative without direct supervision from their supervisors?"

To this related question, the following replies were checked:

- Yes ............ 61 (66.3 per cent)
- Occasionally .. 6  (6.5 per cent)
- No ............ 24 (26.1 per cent)
- No Response .. 1  (1.1 per cent)

Total 92 (100.0 per cent)

These figures show that secretaries are expected to be able
to compose letters on their own more than are stenographers. This is not unexpected as secretaries generally have greater responsibilities. This means that a stenographer who desires to be promoted to a secretarial position should have the necessary skills to compose letters.

"What is the minimum educational level for a stenographer in your firm?"

"What is the minimum educational level for a secretary in your firm?"

Table 9 below shows the results of these questions on the educational level of stenographers and secretaries.

TABLE 9
MINIMUM EDUCATIONAL LEVEL FOR STENOGRAPHERS AND SECRETARIES BY NUMBER AND PER CENT OF FIRMS

<table>
<thead>
<tr>
<th>Educational Levels</th>
<th>Stenographers No.</th>
<th>Stenographers Per Cent</th>
<th>Secretaries No.</th>
<th>Secretaries Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School</td>
<td>47</td>
<td>51.1</td>
<td>32</td>
<td>34.8</td>
</tr>
<tr>
<td>High School or Business School</td>
<td>5</td>
<td>5.4</td>
<td>5</td>
<td>5.4</td>
</tr>
<tr>
<td>Business School</td>
<td>35</td>
<td>38.0</td>
<td>43</td>
<td>46.7</td>
</tr>
<tr>
<td>2 years of College</td>
<td>. .</td>
<td>.</td>
<td>6</td>
<td>6.5</td>
</tr>
<tr>
<td>4 years of College</td>
<td>. .</td>
<td>.</td>
<td>. .</td>
<td>. .</td>
</tr>
<tr>
<td>Open</td>
<td>1</td>
<td>1.1</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td>No Response</td>
<td>4</td>
<td>4.4</td>
<td>5</td>
<td>5.4</td>
</tr>
<tr>
<td>Total</td>
<td>92</td>
<td>100.0</td>
<td>92</td>
<td>100.0</td>
</tr>
</tbody>
</table>

According to this table, 47, or 51.1 per cent, of the companies responding consider a high school business education adequate for persons seeking employment as stenographers.
Thirty-five, or 38.0 per cent, prefer a business college graduate (high school plus two years.) No firm required a college education for this position.

On the other hand, 43, or 46.7 per cent, of the firms indicated that the minimum educational level for secretaries is a business school education and thirty-two, or 34.8 per cent, replied that a high school business graduate would be employable for this position. Six firms, or 6.5 per cent, indicated that they would like at least two years of general college education for their secretarial employees.

From Table 9 it might be concluded that although a high school business graduate is able to obtain employment as a stenographer, the possibilities for promotion are enhanced with a business school education. Employment opportunities are also better for those who do go on to seek post high school business education because of their additional training and increased maturity.

"Do you have any entry-level stenographic and/or secretarial positions that do not require experience?"

The responses to the above question were as follows:

Yes . . . . . . . 30  (32.6 per cent)
No . . . . . . . 57  (62.0 per cent)
No Response . . 5  (5.4 per cent)

Total 92 (100.0 Per cent)

The percentages of stenographic and/or secretarial positions that did not require experience, along with the approximate
number of positions, as reported by 30 companies are shown in Table 10.

**TABLE 10**

PER CENT AND APPROXIMATE NUMBER OF STENOGRAPHIC AND SECRETARIAL POSITIONS THAT DO NOT REQUIRE EXPERIENCE AS REPORTED BY 30 COMPANIES

<table>
<thead>
<tr>
<th>Per Cent of Total Stenographic and Secretarial Positions that Require No Experience</th>
<th>No. of Firms</th>
<th>Approximate No. of Positions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Given</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>10</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>20</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>25</td>
<td>6</td>
<td>14</td>
</tr>
<tr>
<td>50</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>100</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>No Per Cent or No. of Positions</td>
<td>3</td>
<td>..</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>63</td>
</tr>
</tbody>
</table>

According to Table 10, there are approximately 63 positions available to stenographers and secretaries with no experience.

Fifty-seven firms, or 62.0 per cent, indicated that they did not have any entry-level stenographic and/or secretarial positions that do not require experience. The amount of experience required of stenographers and secretaries as specified by these companies are presented in Table 11 on page 42.
TABLE 11
YEAR(S) OF EXPERIENCE REQUIRED BY STENOGRAPHERS
AND SECRETARIES BY 57 COMPANIES

<table>
<thead>
<tr>
<th>Year(s) of Experience</th>
<th>Stenographers</th>
<th>Secretaries</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. Per Cent</td>
<td>No. Per Cent</td>
</tr>
<tr>
<td>Less than 1</td>
<td>4 7.0</td>
<td>1 1.7</td>
</tr>
<tr>
<td>At least 1</td>
<td>9 15.8</td>
<td>5 8.8</td>
</tr>
<tr>
<td>At least 2</td>
<td>3 5.3</td>
<td>7 12.3</td>
</tr>
<tr>
<td>At least 3</td>
<td>1 1.7</td>
<td>3 5.3</td>
</tr>
<tr>
<td>At least 4</td>
<td>.. ..</td>
<td>1 1.7</td>
</tr>
<tr>
<td>At least 5</td>
<td>.. ..</td>
<td>1 1.7</td>
</tr>
<tr>
<td>6-8</td>
<td>.. ..</td>
<td>1 1.7</td>
</tr>
<tr>
<td>9-10</td>
<td>.. ..</td>
<td>1 1.7</td>
</tr>
<tr>
<td>Varies</td>
<td>.. ..</td>
<td>1 1.7</td>
</tr>
<tr>
<td>Not Specified</td>
<td>25 43.9</td>
<td>25 43.9</td>
</tr>
<tr>
<td>No Response</td>
<td>15 26.3</td>
<td>11 19.3</td>
</tr>
<tr>
<td>Total</td>
<td>57 100.0</td>
<td>57 99.8</td>
</tr>
</tbody>
</table>

The amount of experience required of stenographers ranged from less than one year to a maximum of three years. Nine firms, or 15.8 per cent, required at least one year's experience.

On the other hand, the amount of experience required of secretaries ranged from less than one year to ten years. Seven, or 12.3 per cent, of the companies desired at least two years' experience. Twenty-five, or 43.9 per cent, of the firms did not specify the amount of experience required of stenographers and secretaries.

Most of the companies that did not indicate the amount
of experience desired did state the kind of experience as listed in Table 12, ranked by frequency.

**TABLE 12**

**KINDS OF EXPERIENCE REQUIRED OF STENOGRAPHERS AND SECRETARIES**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Previous stenographic or secretarial work experience.</td>
</tr>
<tr>
<td>2</td>
<td>Work experience in directly related field.</td>
</tr>
<tr>
<td>3</td>
<td>Shorthand and typing skills.</td>
</tr>
<tr>
<td>4</td>
<td>Shorthand, typing, and filing skills.</td>
</tr>
<tr>
<td>5</td>
<td>Shorthand.</td>
</tr>
<tr>
<td>6</td>
<td>Previous employment or business training.</td>
</tr>
<tr>
<td>7</td>
<td>Typing and shorthand; command of written and oral English.</td>
</tr>
<tr>
<td>8</td>
<td>Typing and filing proficiency.</td>
</tr>
<tr>
<td>9</td>
<td>Shorthand skills; ability to type and spell.</td>
</tr>
<tr>
<td>10</td>
<td>Good shorthand and typing skills; ability to deal with public; knowledge of office procedures, and general business experience.</td>
</tr>
<tr>
<td>11</td>
<td>General experience.</td>
</tr>
<tr>
<td>12</td>
<td>Positions filled through promotions.</td>
</tr>
</tbody>
</table>

Table 12 shows that experience in a similar position or in a related field were listed most frequently by employers seeking experienced stenographers and/or secretaries.

"What tests do you use for the selection of your stenographers and/or secretaries?"

The responses to this question are shown in Table 13.
TABLE 13
TESTS USED FOR THE SELECTION OF STENOGRAPHERS
AND/OR SECRETARIES

<table>
<thead>
<tr>
<th>Type of Test</th>
<th>No. of Firms Using Testa</th>
<th>Per Cent of Responses (92)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aptitude</td>
<td>36</td>
<td>39.1</td>
</tr>
<tr>
<td>Performance</td>
<td>47</td>
<td>51.1</td>
</tr>
<tr>
<td>I. Q.</td>
<td>8</td>
<td>8.7</td>
</tr>
<tr>
<td>Other</td>
<td>19</td>
<td>20.7</td>
</tr>
<tr>
<td>None</td>
<td>12</td>
<td>13.0</td>
</tr>
<tr>
<td>No Response</td>
<td>6</td>
<td>6.5</td>
</tr>
</tbody>
</table>

aNMost companies used more than one test.

The performance test was mentioned most frequently
among the tests used to select stenographers and secretaries
with 47, or 51.1 per cent, of the respondents checking this
test. Aptitude tests with 36, or 39.1 per cent, was next.
Among the "Other" tests used by companies were mathematics
and interest tests, "Wonderlic," and a company devised test.
Twelve companies, or 13.0 per cent, did not use any test.

Other comments included in this section used in the
selection of stenographers and secretaries were: (1) recom-
mendations; (2) tests administered by employment agency; and
(3) personal appearance.

"Where do you get most of the personnel for steno-
graphic work?"

"Where do you get most of your personnel for secre-
tarial work?"

The responses to these two questions are presented in
Table 14.

<table>
<thead>
<tr>
<th>Source</th>
<th>Stenographers No.(^a)</th>
<th>Stenographers Per Cent</th>
<th>Secretaries No.(^a)</th>
<th>Secretaries Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schools</td>
<td>15</td>
<td>16.3</td>
<td>8</td>
<td>8.7</td>
</tr>
<tr>
<td>Ads</td>
<td>30</td>
<td>32.6</td>
<td>27</td>
<td>29.3</td>
</tr>
<tr>
<td>Inquiries</td>
<td>12</td>
<td>13.0</td>
<td>13</td>
<td>14.1</td>
</tr>
<tr>
<td>Friends of Employees</td>
<td>19</td>
<td>20.7</td>
<td>13</td>
<td>14.1</td>
</tr>
<tr>
<td>Public Employment Agencies</td>
<td>44</td>
<td>47.8</td>
<td>37</td>
<td>40.2</td>
</tr>
<tr>
<td>Private Employment Agencies</td>
<td>50</td>
<td>54.3</td>
<td>43</td>
<td>46.7</td>
</tr>
<tr>
<td>Promotions</td>
<td>25</td>
<td>27.2</td>
<td>34</td>
<td>37.0</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>3.3</td>
<td>2</td>
<td>2.2</td>
</tr>
<tr>
<td>No Response</td>
<td>6</td>
<td>6.5</td>
<td>4</td>
<td>4.3</td>
</tr>
</tbody>
</table>

\(^a\)Companies used more than one source to obtain their stenographic and secretarial personnel.

The most common source for obtaining both stenographers and secretaries was the private employment agencies with 50 firms, or 54.3 per cent, using it to obtain stenographers while 43 firms, or 46.7 per cent, were using it to obtain secretaries.

The next source mentioned for acquiring both stenographers and secretaries was the public employment agencies. The only higher statistic obtained for secretaries was in "Promotions" where more secretaries than stenographers were secured through promotions. Schools did not rank very high
as a source for employers seeking stenographers and/or secretaries.

Under "Other" were mentioned the National Secretaries Association, "walk-ins," and previous applicants.

"Is there any unfilled need for stenographers or secretaries with shorthand training in your firm at the present time?"

The following replies were received to the above question:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>7</td>
</tr>
<tr>
<td>No</td>
<td>84</td>
</tr>
<tr>
<td>No Response</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>92</td>
</tr>
</tbody>
</table>

Of the seven firms answering "Yes,":

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of secretaries needed</td>
<td>9</td>
</tr>
<tr>
<td>Number of stenographers needed</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>11</td>
</tr>
</tbody>
</table>

As 84 firms, or 91.3 per cent, replied that there were no unfilled stenographic or secretarial positions, it seems that the needs of an overwhelming majority of firms are being met, but there are a few positions vacant and waiting to be filled. The vacant positions, however, are so few that the supply and demand for stenographers and secretaries in Honolulu seem to be in balance.

"Has there been an increase or decrease in your employment of workers with shorthand training within the past 5 years?"

The responses to this question are summarized in
Table 15.

<table>
<thead>
<tr>
<th>Trend</th>
<th>No. of Responses</th>
<th>Per Cent of Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>No change</td>
<td>50</td>
<td>54.3</td>
</tr>
<tr>
<td>Increase</td>
<td>29</td>
<td>31.5</td>
</tr>
<tr>
<td>Decrease</td>
<td>10</td>
<td>10.9</td>
</tr>
<tr>
<td>No Response</td>
<td>3</td>
<td>3.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>92</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

According to Table 15, 50, or 54.3 per cent, of the companies surveyed indicated that within the past 5 years there has been no change in the employment of workers with shorthand skills. Twenty-nine, or 31.5 per cent, indicated that there was an increase in their employment of workers with shorthand skills, while 10, or 10.9 per cent, indicated a decrease.

"What is the anticipated trend in the employment of workers with shorthand training for the next 5 years in your firm?"

The replies to this last question of the questionnaire are presented in Table 16 on page 48. Fifty-three firms, or 57.6 per cent, indicated that they expect no change in their employment of workers with shorthand skills; 25, or 27.2 per cent, expect an increase; and 7, or 7.6 per cent, expect a decrease.
TABLE 16
ANTICIPATED TREND FOR THE NEXT 5 YEARS
IN THE EMPLOYMENT OF WORKERS
WITH SHORTHAND TRAINING

<table>
<thead>
<tr>
<th>Anticipated Trend</th>
<th>No. of Responses</th>
<th>Per Cent of Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>No change</td>
<td>53</td>
<td>57.6</td>
</tr>
<tr>
<td>Increase</td>
<td>25</td>
<td>27.2</td>
</tr>
<tr>
<td>Decrease</td>
<td>7</td>
<td>7.6</td>
</tr>
<tr>
<td>No Response</td>
<td>7</td>
<td>7.6</td>
</tr>
<tr>
<td>Total</td>
<td>92</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The reason given for the expected increase in the employment of workers with shorthand skills is the anticipated growth in business with the accompanying increase in executive staff and secretarial work.

The reasons cited for the expected decrease in the employment of workers with shorthand skills, in order of frequency were:

1. Increased use of dictating machines.
2. Increased use of MT/ST equipment.
3. Lack of initiative (on the part of stenographers and secretaries.)
4. Not important.

Under "Other Comments" the following were listed:

1. Secretaries and stenographers must have a minimum speed of 100 words per minute.
2. Combination of shorthand and dictating machines used.
3. Public employment agencies often screen improperly.
4. Little shorthand used; no turnover in past 5 years.

5. Knowledge of manual shorthand invaluable to secretary because of the nature of her work.

6. Stenographers and secretaries have been with firm for a number of years.

7. Recently changed to using transcription machines so stenographers will not be required to have shorthand, secretaries will.

8. Secretaries are administrative assistants rather than secretaries.

**Questionnaire Completed by a Stenographer or Secretary**

There were 89 "A Survey of Stenographers/Secretaries to Determine the Extent to Which Shorthand is Used in Selected Businesses in Honolulu, Hawaii" questionnaires returned. Table 17 on page 50 shows the positions held by those answering the questionnaire.

Although the letter accompanying the questionnaires requested that this questionnaire be completed by a stenographer or secretary, not an executive or administrative secretary, using manual shorthand, several companies did not or were unable to comply with this request. Therefore, for the remainder of this study, the six returns listed under "Other" in Table 17 will not be included. This will keep the statistics limited to persons serving in secretarial or stenographic positions, which was the original intent of this survey. Since the one executive secretary who responded still took dictation, her responses are included in
this study.

**TABLE 17**

POSITION HELD BY PERSON COMPLETING THE QUESTIONNAIRE FOR STENOGRAPHERS/SECRETARIES

<table>
<thead>
<tr>
<th>Position</th>
<th>No. of Responses</th>
<th>Per Cent of Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secretary</td>
<td>67</td>
<td>75.3</td>
</tr>
<tr>
<td>Secretary-Stenographer</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td>Secretary-Receptionist</td>
<td>4</td>
<td>4.5</td>
</tr>
<tr>
<td>Secretary-Clerk</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td>Administrative Secretary</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td>Stenographer</td>
<td>2</td>
<td>2.2</td>
</tr>
<tr>
<td>Clerk-Stenographer</td>
<td>6</td>
<td>6.7</td>
</tr>
<tr>
<td>Stenographer-Receptionist</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clerk</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td>Administrative Clerk</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td>Clerk-Typist</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td>Personnel Assistant</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td>Employment Interviewer</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td>General Manager</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>89</strong></td>
<td><strong>99.7</strong></td>
</tr>
</tbody>
</table>

The categories of "stenographer" and "secretary" as used in this section will include those who hold these positions on a part-time basis along with another position.

Table 17 reveals that there are few full-time stenographers. Most stenographers are expected to fulfill the duties of a clerk as well as a stenographer.

"How many years have you been in this position?"

The responses to this question are summarized in Table 18 on page 51.
TABLE 18

NUMBER OF YEARS STENOGRAPHERS AND SECRETARIES HAVE BEEN EMPLOYED IN THEIR PRESENT POSITIONS

<table>
<thead>
<tr>
<th>Year (s)</th>
<th>Stenographer No.</th>
<th>Per Cent</th>
<th>Secretary No.</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1</td>
<td>1</td>
<td>11.1</td>
<td>5</td>
<td>6.8</td>
</tr>
<tr>
<td>1 - 2</td>
<td>6</td>
<td>66.7</td>
<td>21</td>
<td>28.4</td>
</tr>
<tr>
<td>3 - 5</td>
<td>1</td>
<td>11.1</td>
<td>17</td>
<td>23.0</td>
</tr>
<tr>
<td>6 - 7</td>
<td>. .</td>
<td>. .</td>
<td>7</td>
<td>9.4</td>
</tr>
<tr>
<td>8 - 10</td>
<td>1</td>
<td>11.1</td>
<td>11</td>
<td>14.8</td>
</tr>
<tr>
<td>11 - 15</td>
<td>. .</td>
<td>. .</td>
<td>4</td>
<td>5.4</td>
</tr>
<tr>
<td>16 - 20</td>
<td>. .</td>
<td>. .</td>
<td>3</td>
<td>4.0</td>
</tr>
<tr>
<td>More than 21</td>
<td>. .</td>
<td>. .</td>
<td>5</td>
<td>6.8</td>
</tr>
<tr>
<td>No Response</td>
<td>. .</td>
<td>. .</td>
<td>1</td>
<td>1.4</td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
<td>100.0</td>
<td>74</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Twenty-one secretaries, or 28.4 per cent, were in their present position for less than three years. Seventeen secretaries, or 23.0 per cent, have been in their present positions from three to less than six years; eleven secretaries, or 14.8 per cent, from eight to less than eleven years. This was the only position where service exceeded more than eleven years.

There is a greater turnover among stenographic positions with eight out of the nine employees in this category having served less than five years and only one within the eight to ten years category in the same position.

"What is your educational background?"
Table 19 presents the educational background of the secretaries and stenographers who responded to this question.

**TABLE 19**

**EDUCATIONAL LEVELS OF STENOGRAPHERS AND SECRETARIES PRESENTLY EMPLOYED**

<table>
<thead>
<tr>
<th>Highest Educational Level Completed</th>
<th>Stenographer No. Per Cent</th>
<th>Secretary No. Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than high school</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High school graduate</td>
<td>2 22.2</td>
<td>33 44.6</td>
</tr>
<tr>
<td>Business school graduate</td>
<td>5 55.6</td>
<td>28 37.8</td>
</tr>
<tr>
<td>1 year of college</td>
<td></td>
<td>1 1.4</td>
</tr>
<tr>
<td>2 years of college</td>
<td>1 11.1</td>
<td>9 12.2</td>
</tr>
<tr>
<td>3 years of college</td>
<td></td>
<td>1 1.4</td>
</tr>
<tr>
<td>4-year college graduate</td>
<td>1 11.1</td>
<td>2 2.7</td>
</tr>
<tr>
<td>Total</td>
<td>9 100.0</td>
<td>74 100.1</td>
</tr>
</tbody>
</table>

According to Table 19, 2 stenographers, or 22.2 per cent, and 33 secretaries, or 44.6 per cent, are high school graduates. Five stenographers, or 55.6 per cent, and 28 secretaries, or 37.8 per cent, are business school graduates. There are also nine secretaries and one stenographer with two years' of college work. There were no stenographers or secretaries with less than a high school education.

"What manual system of shorthand did you learn?"

The results of this question are presented in Table 20 on page 53. The predominant system in use is Gregg short-
hand with 76, or 91.6 per cent, of the stenographers and secretaries using this system. Pitman was used by three, or 3.6 per cent, with ABC and Briefhand, both abbreviated longhand systems, with one each, or 1.2 per cent.

TABLE 20

SYSTEM OF MANUAL SHORTHAND LEARNED

<table>
<thead>
<tr>
<th>Manual System</th>
<th>No. of Responses</th>
<th>Per Cent of Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gregg ..........</td>
<td>76</td>
<td>91.6</td>
</tr>
<tr>
<td>Pitman ..........</td>
<td>3</td>
<td>3.6</td>
</tr>
<tr>
<td>ABC ............</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td>Briefhand ......</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td>None ...........</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td>No Response ...</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>83</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

"How many years of shorthand training have you had?"

"Years" as used in this question will be interpreted as equivalent to a school year—approximately 130 hours of classroom instruction. The answers to this question are presented in Table 21 on page 54 according to shorthand systems. One respondent had no training, one did not indicate the system she learned.

Twenty-eight, or 36.8 per cent, Gregg writers had at least two years of training in the system. Twenty-four writers, or 31.6 per cent, had at least three years of training. The users of the Pitman system had a minimum of
TABLE 21

NUMBER OF YEARS OF SHORTHAND TRAINING ACCORDING TO SHORTHAND SYSTEMS FOR 81 SECRETARIES AND STENOGRAPHERS

<table>
<thead>
<tr>
<th>Years of Training</th>
<th>Systems</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gregg</td>
<td>Pitman</td>
<td>ABC</td>
<td>Briefhand</td>
</tr>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Less than 1</td>
<td>2</td>
<td>2.6</td>
<td>1</td>
<td>100.0</td>
</tr>
<tr>
<td>At least 1</td>
<td>14</td>
<td>18.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>At least 1½</td>
<td>3</td>
<td>3.9</td>
<td>2</td>
<td>66.7</td>
</tr>
<tr>
<td>At least 2</td>
<td>28</td>
<td>36.8</td>
<td>1</td>
<td>33.3</td>
</tr>
<tr>
<td>At least 2½</td>
<td>3</td>
<td>3.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>At least 3</td>
<td>24</td>
<td>31.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Response</td>
<td>2</td>
<td>2.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>76</td>
<td>99.8</td>
<td>3</td>
<td>100.0</td>
</tr>
</tbody>
</table>

one and one-half years of training with a maximum of two years. Users of an abbreviated longhand system had no more than one year's training in the system.

"Did your shorthand training include specialization in terminology?"

To this question, the following responses were received:

Yes ........ 11 (13.3 per cent)

No ........ 72 (86.7 per cent)

Total 83 (100.0 per cent)

Those who replied "Yes" indicated the following specialization in terminology:
Legal .................. 4
Congressional ........ 3
Engineering ........... 3
Medical ............... 2
Other* ............... 1
Total ................ 13**

*Not specified.
**Some had more than one specialization.

"Would a knowledge of electronic data processing terminology be helpful in your position?"

The answers to this question were as follows:

Yes ............ 8  ( 9.6 per cent)
No ............. 73  ( 88.0 per cent)
No Response . . 2  ( 2.4 per cent)

Total ........... 83  (100.0 per cent)

Since the responses were overwhelmingly negative to this question, it seems to imply that the secretaries and stenographers who answered the questionnaire have not been affected by the introduction and use of electronic data processing equipment and felt no need for specialization in data processing terminology.

"To what extent do you use your shorthand skills for dictation at the present time?"

The responses to this question are shown in Table 22 on page 56. This table shows that 15, or 18.1 per cent, of the stenographers and secretaries who responded to this question indicated that they used their shorthand skill for
TABLE 22
USE OF SHORTHAND SKILLS FOR DICTATION
BY PERCENTAGE OF USE

<table>
<thead>
<tr>
<th>Per Cent of Usage</th>
<th>No. of Responses</th>
<th>Per Cent of Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>15</td>
<td>18.1</td>
</tr>
<tr>
<td>76 - 99</td>
<td>27</td>
<td>32.5</td>
</tr>
<tr>
<td>51 - 75</td>
<td>7</td>
<td>8.4</td>
</tr>
<tr>
<td>50</td>
<td>2</td>
<td>2.4</td>
</tr>
<tr>
<td>26 - 49</td>
<td>9</td>
<td>10.8</td>
</tr>
<tr>
<td>1 - 25</td>
<td>22</td>
<td>26.5</td>
</tr>
<tr>
<td>No Response</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td>Total</td>
<td>83</td>
<td>99.9</td>
</tr>
</tbody>
</table>

100 per cent of their dictator's correspondences. Twenty-seven, or 32.5 per cent, used their skill for 76 to 99 per cent of their dictator's correspondences. A total of 51, or 61.4 per cent, used their skill for at least 50 per cent of their executives' dictations.

On the other hand, 22, or 26.5 per cent, indicated that they used their skill for less than 25 per cent of their executives' dictation. Table 22 reveals that shorthand skills are needed and used in 98.7 per cent of the firms who employed stenographers and secretaries. This does not substantiate claims by those who say that shorthand is on its way out as a means of recording dictation.

"Do you transcribe from a voice transcription machine?"
Answers checked to this question were:

Yes . . . . . . . 31 (37.3 per cent)
No . . . . . . . 52 (62.7 per cent)
Total 83 (100.0 per cent)

The 31 "Yes" replies are presented in Table 23 below, showing the percentage of usage of voice transcription machines for dictation.

TABLE 23

USE OF VOICE TRANSCRIPTION MACHINES FOR DICTATION
BY 31 SECRETARIES AND STENOGRAPHERS
ACCORDING TO PERCENTAGE OF USE

<table>
<thead>
<tr>
<th>Per Cent of Usage</th>
<th>No. of Responses</th>
<th>Per Cent of Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>75 - 99</td>
<td>10</td>
<td>32.3</td>
</tr>
<tr>
<td>51 - 74</td>
<td>1</td>
<td>3.2</td>
</tr>
<tr>
<td>50</td>
<td>1</td>
<td>3.2</td>
</tr>
<tr>
<td>26 - 49</td>
<td>2</td>
<td>6.5</td>
</tr>
<tr>
<td>1 - 25</td>
<td>17</td>
<td>54.8</td>
</tr>
<tr>
<td>Total</td>
<td>31</td>
<td>100.0</td>
</tr>
</tbody>
</table>

According to Table 23, 17 stenographers and secretaries, or 54.8 per cent, who do use voice transcription machines do so for less than 25 per cent of their dictator's correspondences; however, 10, or 32.3 per cent, use them for 75 to 99 per cent of their dictation. These extremes seem to imply that if there is a trend toward the increased use of transcription machines for dictation by
office personnel, it is just beginning. Therefore, students in the secretarial program should learn to operate transcribing machines as part of their course of study. A stenographer or secretary should be able to transcribe from her own dictation notes as well as from voice transcription machines.

"Do you compose original letters for your superiors?"

The stenographers' answers to this question were:

Yes . . . . .  3  (33.3 per cent)
No . . . . .  6  (66.7 per cent)

Total  9  (100.0 per cent)

Three, or 33.3 per cent, of the stenographers composed original letters while 6, or 66.7 per cent, did not.

The secretaries' responses to this same question were as follows:

Yes . . . . .  57  (79.5 per cent)
No . . . . .  17  (20.5 per cent)

Total  74  (100.0 per cent)

Fifty-seven secretaries, or 79.5 per cent, reported that they were expected to compose original letters for their executives. Only 17, or 20.5 per cent, did not. Secretaries are more likely to be called upon for this skill than stenographers according to the responses received to this question. This indicates that secretarial students should be taught the fundamentals of letterwriting and the psy-
chology of business letterwriting to enable them to handle this part of their responsibility with skill and confidence.

"In your experience, has there been a decrease or increase in the use of your shorthand skill during the past 5 years?"

The replies to this question show that 35 respondents, or 42.2 per cent, did not experience any change in the use of their shorthand skills. Twenty, or 24.1 per cent, reported an increase; 26, or 31.3 per cent, experienced a decrease. The findings of this question are presented in Table 24.

**TABLE 24**

**USE OF SHORTHAND SKILL IN THE PAST 5 YEARS ACCORDING TO EXPERIENCES OF STENOGRAPHERS AND SECRETARIES**

<table>
<thead>
<tr>
<th>Trend in Usage</th>
<th>No. of Responses</th>
<th>Per Cent of Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>No change</td>
<td>35</td>
<td>42.2</td>
</tr>
<tr>
<td>Increase</td>
<td>20</td>
<td>24.1</td>
</tr>
<tr>
<td>Decrease</td>
<td>26</td>
<td>31.3</td>
</tr>
<tr>
<td>No Response</td>
<td>2</td>
<td>2.4</td>
</tr>
<tr>
<td>Total</td>
<td>83</td>
<td>100.0</td>
</tr>
</tbody>
</table>

"Do you anticipate a decrease in the use of your shorthand skill in the next 5 years?"

The answers to this question were as follows:

Yes .......... 25 ( 30.0 per cent)
No ........... 54 ( 64.9 per cent)
No Response .. 4 ( 4.8 per cent)
Total ........ 83 ( 99.7 per cent)
These figures show that 54, or 64.9 per cent, of the stenographers and secretaries do not anticipate any decrease in the use of their shorthand skills within the next 5 years. Twenty-five, or 30.0 per cent, feel that there will be a decrease in the use of their shorthand skills. Among the reasons given for this anticipated decrease were, according to frequency:

1. Increased use of dictating machines.
2. Increased use of electronic equipment.
3. Composing more original letters.
4. Going into different field of employment.
5. Too old for change.
6. Possibility of assisting other executives in the office.
7. Not needed.
CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

The primary purposes for this study were (1) to determine the extent to which manual shorthand is being used as compared with machine shorthand and voice transcription equipment from the employers' point of view as well as from the actual experiences of stenographers and secretaries, and (2) to identify trends in shorthand usage for the past five years and the anticipated trend for the next five years. Stenographers and secretaries are clerical personnel who take and transcribe dictation. Secretaries are more experienced, have greater responsibilities, and generally receive higher salaries than stenographers.

This survey also attempted to identify the amount and kind of education, training, and experience required of stenographers and secretaries, to determine whether there are entry-level positions that do not require experience, and to determine where businesses obtain most of their stenographers and secretaries and the tests used in their selection.

The types of industries included in this study were: communications, financial, diversified, insurance, manu-
facturing, service, trades, and transportation.

One hundred seventy business firms were sent the questionnaire, "A Survey of Business to Determine the Need for Shorthand Skills and the Extent to Which Shorthand is Used in Selected Businesses in Honolulu, Hawaii," to be completed by personnel managers. There were 92 completed returns of this questionnaire. These firms employed a total of 975 stenographers and secretaries with 45 (48.9 per cent) employing less than six stenographers and/or secretaries.

The same firms were sent the questionnaire, "A Survey of Stenographers/Secretaries to Determine the Extent to Which Shorthand is Used in Selected Businesses in Honolulu, Hawaii." There were 83 usable returns completed by 74 secretaries and 9 stenographers.

Of the 170 companies included in this study, 22 (13.0 per cent) returned both questionnaires blank. Twenty of these companies did not use shorthand. Two companies reported the use of manual shorthand as needed--very little or on a part-time basis.

Fifty-four of the 92 firms were unable to determine what per cent of their clerical employees have had shorthand training. Nineteen firms indicated that 100 per cent of their personnel with shorthand training were employed in stenographic or secretarial positions while 19 firms also reported that they employed clerical personnel with short-
hand training who were not using their skills in their present positions.

Twenty-nine companies (31.5 per cent) reported that only manual shorthand was used for 100 per cent of their dictation. Twenty-two firms (23.9 per cent) reported 76 - 99 per cent usage; 3 (3.3 per cent) 51 - 75 per cent; 7 (7.6 per cent) 50 per cent; 5 (5.4 per cent) 26 - 49 per cent; 21 (22.8 per cent) less than 25 per cent usage.

On the other hand, 15 (18.1 per cent) stenographers and secretaries reported 100 per cent usage of manual shorthand; 27 (32.5 per cent) reported 76 - 99 per cent usage; 7 (8.4 per cent) 51 - 75 per cent; 2 (2.4 per cent) 50 per cent; 9 (10.8 per cent) 26 - 49 per cent; 22 (26.5 per cent) less than 25 per cent usage. Employers reported a higher percentage of usage of manual shorthand than did the stenographers and secretaries. All respondents to this question, employers and employees, indicated some use of manual shorthand.

Fifty-two (56.5 per cent) of the 92 firms replied that machine shorthand only was used for less than 25 per cent of their dictation. Thirty-eight (41.3 per cent) reported no use of machine shorthand.

Fifty-eight firms (63.0 per cent) responded that transcription machines only were used for less than 25 per cent of their dictation. Twenty-three (25.0 per cent) did not use transcription machines at all. Nine (9.9 per cent)
reported their use for more than 25 per cent of their dictation.

Nine (9.8 per cent) of 92 firms reported that voice transcription machines were used part of the time for dictation and written or machine shorthand the other part of the time for 100 per cent of their dictation; 3 (3.3 per cent) for 76 - 99 per cent; 3 (3.3 per cent) for 51 - 75 per cent; 9 (9.8 per cent) for 50 per cent; 2 (2.2 per cent) for 26 - 49 per cent; 41 (44.5 per cent) for less than 25 per cent; and 23 (25.0 per cent) did not use any combination of methods.

Thirty-one stenographers and secretaries (37.3 per cent) transcribed from voice transcription machines. Fifty-two (62.7 per cent) did not. Of the 31 using the equipment, 10 (32.3 per cent) reported 75 - 99 per cent usage; 1 (3.2 per cent) 51 - 74 per cent; 1 (3.2 per cent) 50 per cent; 2 (6.5 per cent) 26 - 49 per cent; and 17 (54.8 per cent) less than 25 per cent usage. Employees reported a higher percentage of use of transcription machines than did employers.

The dictation method preferred by executives is manual shorthand with 55 (59.8 per cent) selecting this medium. Eighteen (19.6 per cent) had no preference. Machine shorthand was selected as the method least preferred with 12 (13.0 per cent) of the responses. Here, 49 (53.3 per cent) had no preference.
Forty-four (47.8 per cent) firms expected their stenographers to compose letters under the direction of their supervisors and 6 (6.5 per cent) occasionally asked stenographers to do this. Three (33.3 per cent) of the stenographer-respondents replied that they composed original letters. Employers' expectations were higher than actual practice as reported by stenographers.

Sixty-one (66.3 per cent) firms expected their secretaries to compose letters on their own initiative without direct supervision from their supervisors; six (6.5 per cent) occasionally. Fifty-seven (79.5 per cent) secretaries out of 74 replied that they composed original letters for their supervisors. Employees' experiences as reported by secretaries were slightly higher than employers' expectations. These figures, however, confirm that secretaries are expected to compose original letters by more firms and do so more frequently than do stenographers.

Forty-seven firms (51.1 per cent) stated that the minimum level of education for a stenographer is a high school education. Forty-three (46.7 per cent) indicated that the minimum level for secretaries is a business school education. Among the stenographers, 5 (55.6 per cent) were business school graduates and 2 (22.2 per cent) were high school graduates. Among the secretaries, 28 (37.8 per cent) were business school graduates and 33 (44.6 per cent) were high school graduates.
Thirty companies (32.6 per cent) indicated that they had entry-level stenographic and/or secretarial positions that do not require experience. Among these firms there are approximately 63 out of 975 positions available for inexperienced stenographers and secretaries. This represents 6.5 per cent of the total positions. Fifty-seven firms (62.0 per cent) reported that they did not have positions for inexperienced persons. For stenographers, at least one year's experience in a stenographic position was most frequently mentioned; for secretaries, two years' experience in a secretarial position. Most employers preferred experience in the same or related type of industry.

Performance tests were used most frequently to select stenographers and secretaries with 47 (51.1 per cent) companies using them.

The most common source for obtaining stenographers and secretaries was the private employment agencies. Fifty firms (54.3 per cent) and 43 firms (46.7 per cent) used them to secure stenographers and secretaries, respectively.

Of the 92 responding firms, only seven had vacant secretarial and stenographic positions at the time of the survey. Among these firms, nine secretaries and four stenographers were needed. Since 84 of the companies reported no need, it can be assumed that the demand of the majority of firms is being met.

There is, however, a high turnover in secretarial and
stenographic positions. Twenty-one (28.4 per cent) secretaries have been in their present positions less than three years. Seventeen (23.0 per cent) less than six years. The turnover was even greater for stenographers with only two of the nine having been in their present positions more than three years.

Seventy-six (91.6 per cent) of the 83 stenographers and secretaries who responded used Gregg shorthand. Twenty-eight (36.8 per cent) had at least two years' of training in this system; 24 (31.6 per cent) had at least three years' training. Pitman was used by three (3.6 per cent). All had between one and one-half years' to two years' of training. Abbreviated longhand systems were used by two (2.4 per cent). Each had no more than one year's training in the system.

Only 11 (13.3 per cent) of the stenographers and secretaries had specialization in terminology. In order of frequency, they were: Legal, Congressional, Engineering, and Medical. Also, only eight (9.6 per cent) respondents felt that a knowledge of electronic data processing terminology would be helpful to them.

Comparing the responses between employers and secretaries and stenographers as to need and use of shorthand skills in the past five years, "no change" was reported by 50 (54.3 per cent) of the firms and 35 (42.2 per cent) of the stenographers and secretaries; "increase" was indicated
by 29 (31.5 per cent) employers and 20 (24.1 per cent) 
employees; "decrease" was experienced by 10 (10.9 per cent) 
firms and 26 (31.3 per cent) employees. Employees reported 
a greater decline in the use of their shorthand skills than 
were reported by employers.

The responses as to the anticipated trend for the 
employment of workers with shorthand skills in the next five 
years reveal that 54 (64.9 per cent) stenographers and secre­
taries did not anticipate a decrease in the use of their 
shorthand skills. "No change" in the employment of workers 
with shorthand skills is anticipated by 53 (57.6 per cent) 
companies and an increase is anticipated by 25 (27.2 per 
cent) firms. The reasons cited by employers for the antici­
pated increase in the use of shorthand skills were: 
(1) Expansion and growth; (2) increase in work; and (3) in­
crease in executive staff. These kinds of information may 
not be accessible to secretaries and stenographers.

Twenty-five (30.0 per cent) stenographers and secre­
taries anticipate a decrease in the use of their shorthand 
skills. Seven (7.6 per cent) firms also anticipate a de­
crease. The reasons cited for the decrease by both employees 
and employers were: (1) Increased use of dictating (voice 
transcription) machines; and (2) increased use of electronic 
equipment (MT/ST).
Conclusions

1. Manual shorthand is used more frequently than machine shorthand or voice transcription machines and is the preferred medium for recording dictation.

2. Stenographers are expected to be high school graduates. The minimum level of education for secretaries has increased to at least two years of post high school business education.

3. There is a limited number of stenographic and secretarial positions that do not require experience. Most businesses prefer experienced personnel— one year's experience for stenographers and two years' experience for secretaries.

4. Secretaries as well as stenographers should have the necessary skills for composing original letters.

5. As far as stenographers and secretaries are concerned, there is no general need for specialization in data processing terminology at this time.

6. Stenographic and secretarial students should be trained to transcribe from voice transcription machines.

7. If there is a trend toward the increased use of transcription machines with a decrease in the use of manual shorthand, it is just beginning.

Recommendations

Based on the findings and conclusions of this study,
it is recommended that:

1. High schools continue to offer manual shorthand courses to prepare students for stenographic and secretarial careers.

2. Secretarial students be given training in the use of transcription machines as part of the existing curriculum as it would take approximately 2 to 4 weeks.

3. A study be undertaken to determine whether abbreviated longhand systems would be as acceptable as symbol shorthand systems and whether their dictation speeds would meet the needs of businessmen.

4. A follow-up study of this survey be made in 5 years to determine to what extent the anticipated changes in the use of shorthand skills have taken place and whether a more definite trend in the increased use of transcription machines is evident.
Dear Personnel Manager:

In order to provide business educators with factual and current information to better guide and prepare students for employment in the clerical field as stenographers and secretaries; and, as a partial requirement for my M.S. in Business Administration, I have undertaken a survey to determine the need for shorthand skills and the extent to which shorthand is used in selected business firms in Honolulu.

As a result, I am requesting your cooperation and assistance in the completion of the enclosed two-page questionnaire. It would be very helpful if you would have one of your stenographers or secretaries (one who is not an executive or administrative secretary) who takes dictation using manual (written) shorthand to complete the one-page "Survey of Stenographers/Secretaries" questionnaire which is also enclosed.

The return of both questionnaires in the enclosed stamped and self-addressed envelope by December 11, 1970 will be greatly appreciated.

This study is being made with the cooperation of the Hawaii Business Education Association, and the results of this survey will be made available to its members who represent all segments of the business education community in the State.

Thank you for your time and effort without which this study would not be possible.

Yours very truly,

Amy T. Fujii
Business Education Teacher

Enclosures--3
APPENDIX B

A SURVEY OF BUSINESS TO DETERMINE THE NEED FOR SHORTHAND SKILLS
AND THE EXTENT TO WHICH SHORTHAND IS USED IN SELECTED BUSINESSES
IN HONOLULU, HAWAII

Type of Business
(Finan., Insurance, Trade, Mfg., Service, Agric., etc.)

Name of person completing the questionnaire    Title or Position

Is it possible for you to determine what percentage of your clerical
employees have had shorthand training? Yes    No

If YES, what per cent? _______%

Number of stenographers and secretaries* in your employ _______.

* Stenographers and secretaries will refer to your clerical personnel
who take and transcribe dictation from one or more individuals.
Secretaries relieve officials of minor administrative and business
detail, are more experienced, and receive higher salaries than
stenographers.

PLEASE CHECK YOUR RESPONSES TO THE FOLLOWING QUESTIONS:

1. What per cent of your stenographers and secretaries use only
   manual (written) shorthand for dictation?
   a. 100%    d. 50%
   b. 76 - 99%  e. 26 - 49%
   c. 51 - 75%  f. 25% or less

2. What per cent of your stenographers and secretaries use only
   machine shorthand for dictation?
   a. 100%    d. 50%
   b. 76 - 99%  e. 26 - 49%
   c. 51 - 75%  f. 25% or less

3. What per cent of your clerical personnel use only a voice
   transcription machine?
   a. 100%    d. 50%
   b. 76 - 99%  e. 26 - 49%
   c. 51 - 75%  f. 25% or less

4. What per cent of your stenographers and secretaries use a voice
   transcription machine part of the time and take dictation by
   written or machine shorthand the other part of the time?
   a. 100%    d. 50%
   b. 76 - 99%  e. 26 - 49%
   c. 51 - 75%  f. 25% or less

5. Which dictation method is most preferred by your executives?
   b. Machine shorthand d. No preference
6. Which dictation method is least preferred by your executives?
   a. Manual system ____ c. Voice Transcription machine____
   b. Machine shorthand ____ d. No preference ________

7. Are your stenographers expected to compose letters under the
direction of their supervisors? Yes____ No____

8. Are your secretaries expected to compose letters on their own
initiative without direct supervision from their supervisors?
Yes____ No____

9. What is the minimum educational level for a stenographer in your
firm?
   a. High school ____ c. 2 years of college____
   b. Business school ____ d. 4 years of college____

10. What is the minimum educational level for a secretary in your
firm?
    a. High school ____ c. 2 years of college____
    b. Business school ____ d. 4 years of college____

11. Do you have any entry-level stenographic and/or secretarial
    positions that do not require experience? Yes____ No____
    If YES, what per cent of your total stenographic and/or secre-
tarial positions require no experience? ________%
    If NO, how much and what kind of experience are required
    of stenographers?__________________________
    of secretaries?__________________________

12. What tests do you use for the selection of your stenographers
and/or secretaries?
    a. Aptitude ____ c. I.Q.____
    b. Performance ____ d. Other____________________
                    (Please specify)

13. Where do you get most of the personnel for stenographic work?
    a. Schools ____ e. Public employment agencies____
    b. Ads ____ f. Private employment agencies____
    c. Inquiries ____ g. Promotions____
    d. Friends of employees ____ h. Other____________________
                     (Please specify)

14. Where do you get most of your personnel for secretarial work?
    a. Schools ____ e. Public employment agencies____
    b. Ads ____ f. Private employment agencies____
    c. Inquiries ____ g. Promotions____
    d. Friends of employees ____ h. Other____________________
                     (Please specify)

15. Is there any unfilled need for stenographers or secretaries with
shorthand training in your firm at the present time? Yes____ No____
If YES: No. of secretaries needed______.
       No. of stenographers needed______.
16. Has there been an increase or decrease in your employment of workers with shorthand training within the past 5 years?
   a. No change
   b. Increase
   c. Decrease

17. What is the anticipated trend in the employment of workers with shorthand training for the next 5 years in your firm?
   a. No change
   b. Increase
   c. Decrease

   In your opinion, what will be the cause for this increase or decrease?

   Other Comments:
APPENDIX C

A SURVEY OF STENOGRAPHERS/SECRETARIES TO DETERMINE THE EXTENT TO WHICH SHORTHAND IS USED IN SELECTED BUSINESSES IN HONOLULU, HAWAII

1. Position of person completing the questionnaire:__________________

2. How many years have you been in this position?______ years.

3. What is your educational background? Please check:
   a. Less than high school      d. 2 years of college
   b. High school graduate      e. 4-year college graduate
   c. Business school graduate

4. What manual system of shorthand did you learn? Please check:
   a. Gregg                    c. ABC
   b. Pitman                   d. Briefhand
   e. Other

5. How many years of shorthand training have you had? _____ years.

6. Did your shorthand training include specialization in terminology? Yes____ No____
   If YES, please check:
   a. Medical                   c. Engineering
   b. Legal                     d. Congressional

7. Would a knowledge of electronic data processing terminology be helpful in your position? Yes____ No____

8. To what extent do you use your shorthand skill for dictation at the present time? Please check:
   a. Shorthand is used for 100% of dictator's correspondence
   b. Shorthand is used for 76-99% of dictator's correspondence
   c. Shorthand is used for 51-75% of dictator's correspondence
   d. Shorthand is used for 50% of dictator's correspondence
   e. Shorthand is used for 26-49% of dictator's correspondence
   f. Shorthand is used for less than 25% of dictator's correspondence

9. Do you transcribe from a voice transcription machine? Yes____ No____
   If YES, for what per cent of your dictator's correspondence? Please check:
   a. 75-99%                    d. 26-49%
   b. 51-74%                   e. Less than 25%
   c. 50%
10. Do you compose original letters for your superiors? Yes____ No____

11. In your experience, has there been a decrease or increase in the use of your shorthand skill during the past 5 years? No change____ Decrease____ Increase____

12. Do you anticipate a decrease in the use of your shorthand skill in the next 5 years? Yes____ No____

13. If YES, in your opinion, what would be the reason(s) for this decrease?

________________________________________________________________________
________________________________________________________________________
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