The product of a study to identify and collect data on vocational occupations in which knowledge of languages other than English is an asset, this report contains information of fifteen such occupations. Covered in the individual chapters of the report are banking, building maintenance and construction, food service, health care, hotel, media, nursing, office, protective services and correction, recreation, rehabilitation and therapy, retail and wholesale trade, social service, transportation, and travel and tourism occupations. Each chapter contains the following information: prerequisites for bilingual vocational training project development, employment projections, prerequisites for job placement, a listing of corporations and organizations that supplied data during the study, descriptions of jobs included in the given occupational area, and a career progression ladder that reflects the structure the organizations interviewed during the study. (A project report describing the study and a guide for using the research findings presented in the report are also included.) (MN)
VOCATIONAL CAREERS IN WHICH A LANGUAGE OTHER THAN ENGLISH IS AN ASSET

FINAL TECHNICAL REPORT
Prepared As Part Of:
Contract No.: 300-81-0324

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Submitted to:
U.S. Department of Education
Office of Bilingual Education
And Minority Languages Affairs

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September, 1982

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ACKNOWLEDGMENTS

The authors are grateful to numerous persons for their assistance during this project. The Project Monitor, Ms. Barbara Greenberg of the Office of Bilingual Education and Minority Languages Affairs, U.S. Department of Education, and Dr. Richard H. Naber, Branch Chief, Postsecondary and Vocational Program Development provided guidance and support through the development of this report.

We would especially like to thank all of the individuals who agreed to participate in our data collection effort and who provided us with invaluable insights and information.

Our Panel of Experts assisted us in developing the occupational categories, interview instrument and contacts, and reviewing the draft report. The members of the panel were: Sr. Carmen Banegas-Cabello, Spanish Catholic Center; Dale W. Berry, independent consultant; Kenneth R. Edwards, International Brotherhood of Electrical Workers; Brenda Reed, Bilingual Vocational Training Program Coordinator, UCLA Dental Assistants Program; Iris Santos-Rivera, independent consultant; Michael S. Tang, Bilingual Vocational Training Project Director, Metropolitan State College; and Michael D. Zullo, Director, Corporate Partnership Programs, U.S. Council for the International Year of Disabled Persons.

We would like to thank Dale Berry for researching and writing the sections on employment projections. Edward G. Bourgoin, Director, Columbia Languages Services, was extremely helpful in providing information on the occupations in which languages other than English are an asset.

We would like to extend our thanks to the project staff of the bilingual vocational training and bilingual vocational instructor training programs who met with us to provide feedback on the draft of this report.

We deeply appreciate the help we received from the following individuals, who conducted the computer searches for our literature review: Dr. Bill Higgins, National Institute of Education, and Everette Larson, Reference Librarian, Hispanic Division, Library of Congress.

We extend our gratitude to Jeretha Gass, Robert Redlinger and Cecilia Arguello for their efforts in production.
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ABSTRACT

A research project conducted by Miranda Associates, Inc. identified and collected data on fifteen occupations in which knowledge of languages other than English is an asset. Data and information were obtained and analyzed systematically from several sources, including businesses, community organizations, industry, public agencies, and a literature search. Data obtained included:

- Requisite language and vocational skills;
- Training requirements (prior and concurrent);
- Training availability;
- Earnings;
- Advancement opportunities; and,
- International opportunities.

In addition, employment projections for each occupation are provided, and actual (1978) and projected (1990) employment figures are presented. A listing of corporations/organizations either having a need for employees with knowledge of more than one language or additional information on the occupation described are also given. Career progression ladders are shown that reflect a combination of the structures of the organizations interviewed.

A resource bibliography contains abstracts of selected documents that are relevant to bilingual vocational training programs in a variety of ways. The materials provide information useful to enhancing bilingual vocational training programs that is not directly related to the use of languages other than English on the job.

One chapter (IV) provides a guide to enable readers to use the report effectively. Chapters V through XIX are self-contained, each in the same format, focusing in on one occupational area. The information is provided to enable bilingual vocational training program administrators, educators, and job placement/employment counselors to enhance current and plan for future bilingual vocational training programs.
EXECUTIVE SUMMARY

The Executive Summary is a synopsis of the research study and findings. It is divided into three sections including:

- Background;
- Overview of the project; and,
- General conclusions.

Background

In September 1981, Miranda Associates, Inc. was awarded a one-year contract from the U.S. Department of Education's Office of Bilingual Education and Minority Languages Affairs. The purpose of the contract was to identify and obtain information on non-professional occupations in which a language other than English is an asset. This information is included in this report to enable bilingual vocational training program administrators, educators, and job placement/employment counselors to enhance current and future bilingual vocational training programs, and to plan and develop new programs in areas where jobs will be available.

Bilingual vocational training enables adults of limited English-speaking ability to learn a vocational skill in English while using the native language of the trainee as a medium of instruction when concepts are not clear. In addition, job-related English language skills are taught concurrently with vocational skills. In this manner, trainees who could not benefit from vocational training in English only can acquire the necessary language and vocational skills to perform job-related tasks, and not be delayed in entering the labor market. Bilingual vocational training programs are not designed to teach general English, and graduates are usually not proficient in English in all domains or skill areas. Jobs requiring fluency in English can be filled by bilingual vocational training graduates only after they have received more English training, education, and/or work experience.
Overview of the Project

The project was composed of three primary components: data and information collection; analysis; and dissemination of results. The collection and analysis began in October 1981 and continued until the completion of this report. During this time, Miranda Associates project staff conducted field interviews of businesses, public and private agencies in Washington, D.C., New York City, and San Francisco, as well as collected extensive information from the Library of Congress.

General Conclusions

The general conclusions derived from the study are provided in this section. Although a substantial amount of information was obtained from each business, public and private agency, our sample of such organizations is not representative of all business, public and private agencies. Therefore, the generalizability of our conclusions is limited in scope. With this caveat in mind, however, we feel confident that our conclusions are not only relevant to those organizations interviewed, but also are relevant to a much broader range of organizations not interviewed.

The primary purpose of this project was to identify fifteen non-professional occupations in which a language other than English is an asset. The underlying assumption of this project was not that there were occupations in which a language other than English would be an asset, but that business, public and private agencies consciously considered languages other than English as an asset at all. In general, this assumption proved to be true, although perceptions of the value of languages other than English were sometimes difficult to uncover. Unlike tangible assets, most of the personnel we interviewed could not assign any substantive, measurable value to a language other than English. Indeed, while many individuals indicated that they believed another language may be "essential" or "necessary" for business or organizational operation, they had not defined exactly what was meant by "essential" or "necessary" in tangible terms. By reviewing all of the data, we identified three ways in which a language could be an asset.
These are:

- a language other than English is an asset in obtaining certain types of jobs;
- a language other than English may be, and often is, an asset in professional advancement; and,
- a language other than English may allow for salary benefits.

The single most important conclusion we derived from this study was: Given a choice between two individuals with equivalent technical capabilities, English language skills, employment competencies and experience, the individual with proficiency in another language(s) would usually be preferred for employment over the individual who did not have such a proficiency. And in certain situations, the language asset would actually be weighed so that an individual might be given a job even if he/she were not as qualified as a monolingual English speaker. This conclusion is most relevant to those businesses, e.g., hotels or public agencies, police departments, in which there is a great deal of direct contact between non-English speaking patients, clients, businessmen, etc. and "front-line" employees, i.e., those employees who have direct, initial, and often times, the only contact with patients, clients, businessmen, etc.

The second important conclusion was that knowledge of a second language (other than English) often is an asset in professional advancement. This conclusion varied in importance from occupational area to occupational area, however, and also within an occupational area, depending on the specific organizational structure and operation. For example, for radio stations broadcasting in a language other than English, the importance of the second language is consistent from entry level through most all other positions (including supervisory and administrative positions). In banking occupations; however, the importance of the additional language is greatest for "front-line" employees, e.g., bank tellers, customer service representatives; the value of knowledge of other languages in supervisory or administrative positions varied, but tended to decrease the farther away an employee was removed from direct contact with customers who speak languages other than English.
While proficiency in languages other than English often is an asset in professional advancement, most businesses could only offer a very rudimentary judgment as to how much an asset it was in occupational advancement. Under most circumstances, the value of additional languages for advancement was viewed in the same manner as for initial employment. That is, the language capability might prove to be the only significant difference between two equally qualified employees for promotion. For public and private agencies, there was more consistency in how proficiency in other languages could be an asset for career advancement. Many require agencies, through their own recognition or because of regulatory requirements, had definite policies concerning the value of skills in languages other than English. For example, police and fire department officials not only indicated a monetary value of knowledge of languages other than English, but also the value such knowledge would have for career opportunities.

The third important conclusion was that proficiencies in other languages might allow for salary benefits. This conclusion was, however, not always clear-cut in nature. In general, there was not a direct relationship between salary levels and the language asset. While some public agencies did provide for specific salary increments, most businesses did not. For example, the entire State of California gives special attention to bilingual State employees because of the California Bilingual Services Act. This Act requires that bilingual services be provided by State agencies whenever an agency conducts business with a population that is at least five percent monolingual non-English speaking. California has instituted a policy of prescribed salary increments for employees who speak languages other than English on the job for a minimum specified percentage of time.
CHAPTER I
INTRODUCTION

Purpose

The purpose of the research project was to identify and obtain information on fifteen occupations in which knowledge of languages other than English is an asset, and to provide this information to bilingual vocational training program administrators, educators, and job placement/employment counselors and future bilingual vocational training programs.

Objectives

Eight objectives were identified to successfully complete project activities. These objectives were:

- To develop a system for identifying occupations which utilize both the English language and a non-English language for opportunities in career development;
- To develop a process for maintaining up-to-date information on labor market trends and opportunities for employment in these job areas;
- To identify fifteen occupations in which a language other than English is an asset;
- To outline the different levels of career development for each occupation with prerequisites and other skills needed for obtaining employment at each level;
- To provide the kind of information that will assist the development of bilingual vocational training programs and prepare trainees to find jobs in these occupations;
- To establish job market trends by region for each occupation;
- To disseminate information about the activities of the project in order to create an awareness of the project's objectives, activities and expected deliverables so that bilingual vocational training administrators, educators, and job placement/employment counselors can utilize such information; and,
- To prepare reports on the information developed or collected on the project.
CHAPTER II
PROJECT APPROACH AND METHODOLOGY

In Chapter I, eight objectives were listed which had been identified as being necessary for successful completion of the project. To achieve these objectives, seventeen individual tasks were delineated. In Chapter II, we provide a brief discussion of the approach and methodology used to accomplish these tasks.

This project can best be described as a research-survey-dissemination project—research because data and information were systematically gathered and analyzed, survey because this technique was used for obtaining and analyzing data on current labor market conditions and trends, and, finally, dissemination because relevant data and information were brought together in this report and the research findings will be disseminated to appropriate individuals.

Data and information were obtained and analyzed systematically from several different sources and brought together into this technical report. Six specific tasks were involved with the data gathering and analysis component of the project. These tasks were:

- Conduct job market study;
- Conduct outreach meetings;
- Identify occupational categories;
- Conduct literature search and establish resource bibliography;
- Develop corporate inventory; and,
- Develop a career progression ladder for each occupation.

Data were obtained from businesses, community organizations, industry and public agencies during the job market study and outreach meetings concerning fifteen occupations in which a language other than English is an asset. Data obtained included the requisite language and vocational skills, advancement opportunities, earnings, international opportunities, and the length and availability of training programs for each occupation. Also obtained was information concerning manpower trends to 1990 by occupation, procedures and requirements for career advancement, and an inventory of organizations and agencies which require personnel who can speak languages other than English.
In addition, Miranda Associates staff conducted three literature reviews. The first review was conducted at the Library of Congress. One thousand documents were reviewed on this occasion. The second literature review involved two computer searches at the National Institute of Education's Education Reference Center. The third literature review involved a single computer search of the Library of Congress' Hispanic Division. In all, well over two thousand documents were reviewed during the data gathering and analysis component. The resource bibliography (Appendix C) contains abstracts of selected documents. A search of classified advertisements in 10 major newspapers in large metropolitan areas throughout the country was conducted to obtain additional information on the need for individuals with knowledge of languages other than English.

The data and information document development and dissemination tasks consisted of five major activities. These activities were:

- Prepare outline of final technical report;
- Prepare draft of report;
- Conduct field review;
- Revise report;
- Reproduce report; and,
- Disseminate research findings.

The outline of the final technical report was developed during the beginning stages of the project. This was done to ensure its practicality and usefulness.

The draft report incorporated all relevant data that had been collected from the various sources, i.e., the job market study, outreach meetings, and literature review. Miranda Associates staff received feedback on the draft from a Panel of Experts, Project Directors from bilingual vocational training programs and bilingual vocational instructor training program, and Federal officials. The Project Directors met for four days to conduct a field review of the draft report with Miranda Associates staff members. Recommendations were made on a variety of areas, on content as well as on presentation. Again, the emphasis was on the usability of the report for enhancing and planning bilingual vocational training programs. Revisions were made, based on all recommendations.
CHAPTER III
SELECTION OF OCCUPATIONS IN WHICH A LANGUAGE OTHER THAN ENGLISH IS AN ASSET

In this Chapter, we provide a brief discussion on the fifteen occupations selected in which knowledge of a language other than English is an asset, the reasons for their selection, and sources of information.

Reasons for Selection

In 1974, the Bilingual Vocational Training program was first authorized by the Congress as a response to "one of the most acute problems in the United States" involving those persons "whose efforts to profit from vocational education are severely restricted by their limited English-speaking ability," because they come from an environment where the dominant language is other than English and, therefore, are unable to "fill the critical need for more and better educated personnel in vital occupational categories."

Under Subpart 3 of Part B of the Vocational Education Act of 1963, as amended, the Congress authorized grants and contracts for the development of instructional materials, methods, or techniques for bilingual vocational training. While bilingual vocational programs have produced successful models for preparing persons of limited English-speaking ability for work in environments where English is commonly used, there has been a lack of information on the emerging occupations that will recognize and utilize the trainees' native languages as an asset.

The selection of fifteen occupations in which a language other than English is an asset was based on one major assumption and several important requirements. The one basic assumption was: any individual, regardless of his/her occupation (professional or non-professional), will find capability in languages other than English an asset when that individual works in an environment where a language other than English is extensively spoken. For example, regardless of occupation, any individual would find Spanish an asset if he/she worked in the "little Havana" section of Miami, Florida.
An additional factor to be considered was that many bilingual vocational trainees would work in environments in which a language other than English is the primary mode of communication (and, therefore, all occupations would find other languages an asset). Therefore, the occupations selected were national in scope and not restricted to any particular region.

In selecting fifteen occupations, several important criteria were used. These are:

- The occupations should not require or normally have as a standard, an Associate of Arts or Baccalaureate degree;
- The occupations should have advancement opportunities;
- The occupations should, in general, have growth potential in the near future;
- The occupations should be those for which bilingual vocational training programs can train limited English-speaking persons; and,
- The occupations should have enough need for languages other than English to provide employment to more than nominal numbers of bilingual vocational training program graduates.

We feel that in the fifteen selected occupations, languages other than English are an asset even if the environment they were in did not have a high concentration of speakers of other languages. The reason for this is that each selected occupation has a strong "public interaction" aspect, increasing the probability that proficiency in another language would be an asset, whatever the concentration of speakers of other languages. While this is not easy to determine with specificity, for each selected occupation, there was strong agreement among the Panel of Experts, organization/agency representatives, and Miranda Associates project staff that knowledge of other languages would be beneficial.

Sources of Information

Presented in Figure 1 is a complete list of business, public and private agencies from which information was obtained concerning various occupations. These organizations were selected because:

- Each had one or more of the applicable occupations;
Each had employees who spoke languages other than English;
Each had a need for employees who spoke languages other than English; and,
Each was willing to provide information to Miranda Associates project staff.

While no single occupation from a specific organization could be said to represent an entire occupational area, it is felt that the information concerning each occupation discussed in the following chapters is, in general, representative. When occupational information obtained in this manner was not detailed enough, additional information was obtained from the "Dictionary of Occupational Titles"* and "The Occupational Outlook Handbook."**


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<td>9. Protective Services/Correction</td>
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<td>10. Recreation Occupations</td>
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<td></td>
<td>Convention Center</td>
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*Bilingual Services Program--affects all occupations of State of California where an employee uses a language other than English in performing his/her job at least 10% of the time.
CHAPTER IV
USE OF THE RESEARCH FINDINGS

Overview of the Chapter

A substantial amount of data and information is contained in this report. To assist the reader to use the report effectively, this chapter offers suggestions and recommendations concerning the areas of:

- General use of the report;
- Use of the employment projections;
- Use of the listings of organizations/corporations;
- Use of the job descriptions; and,
- Use of the career progression ladders.

General Use of the Report

As noted in the Introduction, Chapter I, the purpose of this research project was to identify and obtain information on fifteen occupations in which a language other than English is an asset, and to provide this information to bilingual vocational training program administrators, educators, and job placement/employment counselors to enhance current and future bilingual vocational training programs. The purposes of the report are to, first, bring together, in a single document, the relevant data and information obtained during the performance of contract activities, and, second, to disseminate these data and information so that individuals concerned with the future of bilingual vocational training programs can modify current program operations and plan effectively for the future.

This report is neither a "cookbook" nor "blueprint" for bilingual vocational training administrators to set up or manage a bilingual vocational training program. Instead, it should be looked upon as a practical guide to assist individuals when they review the relevancy of their curriculum content and make projections concerning employment opportunities for bilingual vocational trainees. While this report can be used by, and be a benefit to, either an experienced bilingual
vocational training administrator or a novice to the field of bilingual vocational training, most of the document is written in a style commensurate with individuals of only limited experience. Therefore, some of our suggestions and recommendations may be "old-news" to some bilingual vocational training administrators, educators, or job placement/employment counselors; however, we feel strongly that all our suggestions and recommendations are important. Because they were derived from our recent experience talking with businessmen, public employees, and individuals concerned with bilingual vocational training programs, all our data, information, suggestions and recommendations reflect current issues and topics (even "old news" can be important when it confirms or reiterates previously known facts or opinions).

As a guide, the report is best suited to provide data and information in such a manner that the reader must use his/her own professional judgment and expertise in drawing ultimate conclusions and deciding upon actually following through on recommendations. We have tried to avoid being too liberal in our interpretations. Instead, we have derived interpretation only as much as justified given the limitations and constraints placed upon data collection and analysis.

After reading the report, an individual should have sufficient knowledge to further explore topics or issues on his/her own. No claims are made that our data and information are totally comprehensive or exhaustive; however, enough data and information are provided to give direction to one who wants to better understand or improve upon one's knowledge of bilingual vocational training related topics and issues.

Chapters V through XIX discuss each of the selected fifteen occupations. Each of these chapters is similar in structure; that is, each has:

- A section of prerequisites for bilingual vocational training project development;
• Employment projections;
• Prerequisites for job placement;
• A listing of corporations/organizations either having a need for employees with knowledge of more than one language or additional information on the occupation described or were data sources;
• Job descriptions; and,
• A career progression ladder.

Use of the Employment Projections

In each of the fifteen chapters dealing with occupations in which languages other than English are an asset, employment projections are provided. These projections are based on data from the United States Bureau of Labor Statistics (BLS). Projected total employment for each occupation and the corresponding percentage change between 1978 and 1990 are shown for three series of projections: Low (l), Medium (m), and High (h).

There are several important factors to keep in mind when reviewing these projections. First, the occupations listed are often more inclusive than those contained in the report. Not all listed occupations are applicable to bilingual vocational training programs.

Second, the 1990 projections and percent change columns need to be examined two ways: (a) in terms of growth potential as percent change from 1978 to 1990, and (b) in terms of actual employment numbers. Neither column should be reviewed in isolation. The reasons for this are:

- Percent change is an excellent indicator of growth potential (obviously bilingual vocational training administrators will want to orient their programs to occupations with long-term growth potential);
- Percent change is based on the projected change of actual employment opportunities; as such, percent change figures would not be directly compared with one another; and,
• The most important occupational areas are those that combine high growth potential with high actual employment opportunities.

Third, there are no data on what percent of each of the occupational areas needs individuals who are speakers of languages other than English. While we have included only occupational areas that we have reason to believe will have need for speakers of languages other than English, there are no figures of how great is this need.

Fourth, growth potential and actual employment opportunities do not reflect salary scales. Whether or not an occupational area offers high or low salary incentives needs to be examined within the context of growth potential and actual employment opportunities. High occupational demand does not necessarily mean high salary incentives. For example, individuals competent in computer programming are in high demand and are being offered good salary incentives. Waiters' assistants are also projected to have high growth potential; however, waiters' assistants are not expected to be offered high salaries.

Fifth, all employment projections are based on national figures. While these figures may be beneficial for bilingual vocational training programs that have a trainee employment orientation that is national in scope, most programs are oriented towards local employment demands. And local employment demands may be substantially different from the national figures. Program administrators should keep informed of local market demands, particularly for occupational areas with limited actual employment opportunities.

Sixth, the geographical distribution and growth potential of actual employment opportunities may or may not be consistent. For example, the demand for and growth potential of restaurant chefs tends to be highly concentrated in metropolitan areas. This distribution may be further analyzed in terms of food specialties; that is, chefs for Chinese restaurants are not only primarily in demand in metro-
politician areas, but within specific limited areas of the metropolitan areas. A bilingual vocational training program administrator needs to know, as accurately as possible, the distribution of employment opportunities for each of the occupational areas in which training is provided. In addition, some information as to the distribution of employment opportunities for speakers of languages other than English should be obtained. While this will not be easy, it will provide valuable insights on employment opportunities most important for the trainees.

Use of the Listings of Organizations/Corporations

The organizations listed as sources of data are those from which individuals were actually interviewed by Miranda Associates staff. As is readily apparent, the number of organizations from which data were obtained are few. This raises the question of, "How generic are our results, given the limited number of organizations represented?" This is a difficult question to answer. The best answer is, "Be very cautious in making decisions derived from our results, and always compare our results, data, and information with local conditions." For example, one hotel representative indicated a strong need for speakers of languages other than English. However, how comparable are hotels in organizational structure and operation? A representative sample of organizations for any of the fifteen occupational areas was far beyond the scope of this study. And because of this, a bilingual vocational training program administrator would be wise to conduct an informal local study of employment opportunities, regardless of how optimistic preliminary data and information may be. In addition to the data sources there is also a list of organizations from which additional information can be obtained concerning some or all of the specific jobs included in an occupational area. Each of these organizations should be contacted for in-depth information.

In each of the fifteen chapters discussing occupational areas, there is a list of organizations that recently advertised for employees who spoke languages other than English. This information
was obtained by reviewing the advertisement section of ten large daily newspapers. The value of this information is that it provides an indication of what types of organizations are seeking employees proficient in a language other than English. For a bilingual vocational training administrator, an inventory of local organizations' advertising could provide:

- Information on the specific type of organization;
- Information on the specific types of positions being advertised;
- The languages in demand;
- The salary range;
- The geographical area in which such employees would work; and,
- The number of positions available.

In large metropolitan areas demands as exhibited by newspaper advertisements can be analyzed.

Use of the Job Descriptions

At the heart of every chapter dealing with an occupational area are the descriptions of each job. These descriptions provide information on:

- Duties;
- Language skills;
- Training requirements;
- Training availability;
- Earnings;
- Advancement opportunities; and,
- International opportunities.

With each job, an extensive list of duties is included. These duties were obtained by either interviewing personnel within an organization, or by referring to documents such as the Occupational Outlook Handbook. For most jobs, we feel confident that the duties listed are both comprehensive and consistent; they encompass the primary activities and responsibilities of that job and are applic-
ble to a job regardless of the particular employment situation. There are some exceptions to this statement, of course, and a bilingual vocational training administrator should compare listed duties with duties defining a comparable job in his/her area.

Every attempt has been made to use those job titles that are the most consistently used by employers. Regional and even local differences exist, however, and should be incorporated into the duties listed.

For any vocational training program, the duties listed could very well be translated into job competencies. These job competencies could then be used to develop a new training curriculum, or modify an existing one. The closer the competencies of a training program reflect the actual job duties a trainee will be expected to have as an employee, the more likely that the trainee will be able to compete in the labor market.

The language skills are divided into (a) English and (b) other language skills. The English skills described reflect the English language skills needed for job performance; information on both oral and reading/writing is also included. Very specific quantifiable and qualifiable data on language requirements were very difficult to obtain. Surprisingly few organizations had in-depth substantive information on the proficiency necessary to perform a job. This was more applicable to the other language skills than for the English skills. All organizations that did not operate entirely with a language other than English indicated that English proficiency was a critical requirement and a constant source of difficulty. While "proficiency" could not be defined exactly, e.g., "high school level", one fact is indisputable—the more skilled a bilingual vocational trainee is in English, the more likely he/she will be able to compete for most positions. The inability to speak English adequately was one of the major problems identified by employers when hiring native speakers of other languages. While no organizational
Some of the information contained in the job descriptions can be used as criteria for entrance into a bilingual vocational training program. Depending upon the program offered, different criteria can be used to screen applicants. For example, some jobs require a high school diploma, while others do not. If a specific position does require a high school diploma, then a bilingual vocational training program administrator can effectively screen applicants based on this criterion.

Salary ranges should be viewed as indicative, not specific. Because of the limited number of organizations interviewed and the small number of cities visited, salaries are not always representative of the nation. While the Occupational Outlook Handbook provided more generic salary information, program administrators should determine what the salary range is in their locale.

Each job description is listed in order of entrance level, from the lowest to the highest. Some management positions are included; however, these positions include only those that can be obtained realistically by a bilingual vocational trainee.

Use of the Career Progression Ladders

The career ladders included in the report reflect the structure of the organizations interviewed. These ladders can be used to "place" a position within the context of a total organization. Obviously, any career ladder is situation-specific, and should not be viewed as necessarily consistent for all situations.
# CHAPTER V

## BANKING OCCUPATIONS

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BANKING OCCUPATIONS

Prerequisites for Bilingual Vocational Training Project Development

Six banking occupations are described in detail in this chapter. These are:

- Bank Clerk;
- Bank Teller;
- Full Service Teller;
- Safety Deposit Supervisor;
- Customer Service Representative; and,
- Assistant Branch Manager.

For all of these occupations, a high school diploma is preferred or required. Trainees who do not meet this requirement can be screened out of this particular training area, or, can be referred to other sources to attain a General Education Diploma (GED).

English-as-a-second language classes could concentrate on letter writing, telephone and interviewing skills, as well as dealing effectively with customers in a courteous and helpful manner. Applicants may be asked to demonstrate their ability to work rapidly and accurately. Beyond the duties listed under each job description, it would be beneficial to include in the vocational training component classes in typing, bookkeeping, and office machine operation.

For the banking occupations in general, knowledge of a language other than English is not essential, even in the International Division. It is considered desirable or advantageous for those employees who have direct contact with customers. It should be noted that in some geographical areas, individuals may be hired specifically for their native language skills, when they are at least partially qualified for a particular job. English language skills are extremely important, nonetheless.

Trainees who enter the banking industry as a bank clerk or teller can advance to "platform" (customer service) or supervisory/managerial positions with additional specialized courses, outstanding job performance
and banking experience. The American Institute of Banking, part of the American Bankers Association, offers seminars and financial courses and correspondence study.

Platform employees and (assistant) branch managers need to have prior banking experience, not only vocational training.

Employment Projections

The banking industry is expected to experience above-average growth of employment during the 1980's, and similar growth patterns are expected for most of the occupations in that industry. The rate of employment growth for bank tellers is projected to be at least 50 percent higher than the growth rate of all occupations combined. Banking and insurance clerks also will experience higher than average growth of employment, while employment of bookkeepers and accounting clerks will about parallel the average growth for all occupations. Job opportunities will stem from growth in the industry, i.e., as well as from the need to replace workers. Banking should continue to be a good source of steady employment, i.e., banks expanding their services, new banks and branches opening.
| Job Title                      | Education                  | Training/Experience                                      | Language Skills Required | Other Language |
|-------------------------------|----------------------------|----------------------------------------------------------|--------------------------|----------------|----------------|
| Assistant Branch Manager      |                            | 1 yr. advanced training or education OR 1-2 yrs. experience as teller, customer service representative. |                          |                |
| Customer Service Representative|                            | Math; bank procedures, operations; knowledge of bank products and services, compliance with laws; good typing skills. | Interviewing, telephone skills. | Letters, legal papers. | Interviewing, telephone skills. |
| Safety Deposit Supervisor     |                            |                                                          |                          |                |                |
| Full Service Teller           |                            | 3-6 months experience as bank teller.                    |                          |                |                |
| Bank Teller                   | High school or equivalent  | Basic math, typing skills; bookkeeping; office machine operation. | Conversing with customers in person; telephone skills. |                | Conversing with customers in person; telephone skills. |
| Bank Clerk                    | High school or equivalent  |                                                          | Telephone skills.        |                | Telephone skills. |

Job titles are listed in order of advancement. Further details are provided in the job descriptions for each job title.
Table 2
Employment in Banking Occupations
Actual 1978 and Projected 1990*

<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>1978</td>
<td>1990</td>
</tr>
<tr>
<td>ALL OCCUPATIONS COMBINED</td>
<td>97,610</td>
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</tr>
<tr>
<td></td>
<td>L: 119,590</td>
<td>L: +22.5</td>
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<tr>
<td></td>
<td>M: 121,447</td>
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<tr>
<td></td>
<td>H: 129,907</td>
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<tr>
<td>CLERICAL WORKERS</td>
<td>17,820</td>
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</tr>
<tr>
<td></td>
<td>L: 22,219</td>
<td>L: +24.7</td>
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<tr>
<td></td>
<td>M: 22,519</td>
<td>M: +26.4</td>
</tr>
<tr>
<td></td>
<td>H: 23,705</td>
<td>H: +33.0</td>
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<tr>
<td>BANK TELLERS</td>
<td>440</td>
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<td></td>
<td>L: 601</td>
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<td>M: 606</td>
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<td>H: 619</td>
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<tr>
<td>New Accounts Tellers</td>
<td>48</td>
<td></td>
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<tr>
<td></td>
<td>L: 65</td>
<td>L: +34.7</td>
</tr>
<tr>
<td></td>
<td>M: 66</td>
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<td></td>
<td>H: 67</td>
<td>H: +39.2</td>
</tr>
<tr>
<td>Tellers</td>
<td>392</td>
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<td></td>
<td>M: 548</td>
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<tr>
<td></td>
<td>H: 552</td>
<td>H: +40.8</td>
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<td>BOOKKEEPERS AND ACCOUNTING CLERKS</td>
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<tr>
<td>Accounting Clerks</td>
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<td>M: 845</td>
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</tr>
<tr>
<td></td>
<td>H: 895</td>
<td>H: +27.8</td>
</tr>
</tbody>
</table>

*Employment projections are based on data from the U.S. Bureau of Labor Statistics. For each industry, employment in 1978 is shown, and three series of employment projections are shown for 1990: Low (L), Medium (M) and High (H). For comparison, projections also are shown (in capital letters) for all occupations combined and for the major occupational groups of which the occupations studied are a part. The projections are explained and additional detail is provided in Appendix A.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1978</td>
<td>1990</td>
</tr>
<tr>
<td>Bookkeepers, Hand</td>
<td>927</td>
<td>L: 1,147 M: 1,168 H: 1,236</td>
</tr>
</tbody>
</table>
BANKING
LISTING OF CORPORATIONS/ORGANIZATIONS

DATA SOURCES

- Bank of Maryland
- Citibank, NY
- First Interstate Bank, CA
- Riggs National Bank, Washington, D.C.

ADDITIONAL INFORMATION

- Banking occupations, training opportunities, banking industry:
  - American Bankers Association
    Bank Personnel Division
    1120 Connecticut Avenue, N.W.
    Washington, D.C. 20036
  - National Association of Bank Women, Inc.
    National Office
    500 N. Michigan Avenue
    Chicago, IL 60611
  - National Bankers Association
    499 S. Capitol Street, S.W.
    Suite 520
    Washington, D.C. 20003

- Employment opportunities in each state:
  - State bankers' associations
  - Banks

- Names and addresses of banks and principal officers in specific locations:
  - Polk's World Bank Directory (Nashville, R.L. Polk & Co.).

CORPORATION/AGENCY LISTING JOB OPPORTUNITIES

<table>
<thead>
<tr>
<th>Corporation/Agency</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Bank</td>
<td>New York, NY</td>
</tr>
<tr>
<td>Southern California Savings</td>
<td>Los Angeles, CA</td>
</tr>
<tr>
<td>Southern California Savings</td>
<td>Beverly Hills, CA</td>
</tr>
<tr>
<td>General Bank of Commerce</td>
<td>Los Angeles, CA</td>
</tr>
<tr>
<td>Mitsubishi Bank of California</td>
<td>Los Angeles, CA</td>
</tr>
<tr>
<td>Tokyo Bank of California</td>
<td>Los Angeles, CA</td>
</tr>
<tr>
<td>Financial Services</td>
<td>Los Angeles, CA</td>
</tr>
<tr>
<td>Bank of Nova Scotia</td>
<td>New York, NY</td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Bowery Saving Bank</td>
<td>New York, NY</td>
</tr>
<tr>
<td>Golden Pacific Bank</td>
<td>New York, NY</td>
</tr>
<tr>
<td>Manufacturers Hanover Trust Company</td>
<td>New York, NY</td>
</tr>
<tr>
<td>Marine Midland Bank</td>
<td>New York, NY</td>
</tr>
</tbody>
</table>

**Type of Corporation:**

<table>
<thead>
<tr>
<th>International Bank</th>
<th>New York, NY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank</td>
<td>Los Angeles, CA</td>
</tr>
</tbody>
</table>

**Bilingual Employment Agencies:**

<table>
<thead>
<tr>
<th>Career Concepts</th>
<th>New York, NY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salem Association</td>
<td>New York, NY</td>
</tr>
<tr>
<td>Interlanguage Bilingual Specialists</td>
<td>New York, NY</td>
</tr>
<tr>
<td>Bilingual Agency</td>
<td>New York, NY</td>
</tr>
<tr>
<td>Hanover Bilingual Specialists</td>
<td>New York, NY</td>
</tr>
</tbody>
</table>
JOB TITLE: BANK CLERK

DUTIES:

- Sorts checks.
- Totals debit and credit slips.
- Prepares monthly statements for depositors.
- May include, depending on employer:
  - Operating cancelling and adding machines, equipment unique to banking, e.g., bookkeeping, posting machines.
  - Sorting checks and drafts on other banks, list and total the amounts involved, and prepare documents to be mailed for collection.
  - Servicing foreign deposit accounts, determine charges for cashing or handling checks drawn against such accounts.
  - Keeping records on interest-bearing items that are due to or from the bank.
  - Typing legal papers dealing with real estate upon which money has been loaned, maintaining records relating to taxes and insurance on these properties.

LANGUAGE SKILLS:

ENGLISH: Oral skills: conversing with customers, in person, on the phone. Reading and writing skills: record keeping; preparing monthly statements; check sorting.

OTHER LANGUAGE: Oral skills: conversing with customers in person or on the phone.

TRAINING REQUIREMENTS:

PRIOR: High school or equivalent. Courses in bookkeeping, typing, business arithmetic, office machine operation.

CONCURRENT: On-the-job training to operate various bank office machines.

TRAINING AVAILABILITY:

Banking or financial institution.
EARNINGS:

1980: average earnings:

inexperienced: $6,000 to $8,000 per year.

ADVANCEMENT OPPORTUNITIES:

To clerical supervisor, teller or credit analyst. With college training or specialized courses and outstanding job performance can advance to bank officer, managerial positions.

INTERNATIONAL OPPORTUNITIES:

Some work with foreign accounts at this level; working in an International Division where available in a bank.
JOB TITLE: BANK TELLER

DUTIES:
- Cashes checks and handles deposits and withdrawals from checking and savings accounts.
- Sells savings bonds; accepts payments for customers' utility bills.
- Receives deposits for Christmas club accounts; keeps records and performs the necessary paperwork for customer loans.
- Handles foreign currency, sells travelers' checks or computes interest on savings accounts.
- After banking hours, teller counts cash on hand, lists the currency-received tickets on a settlement sheet and balances the day's accounts.
- Sorts checks and deposit slips.

LANGUAGE SKILLS:

ENGLISH: Oral skills: conversing with customers, determining their needs; telephone skills (checking balances of accounts); taking and following instructions. Reading and writing skills: filling out withdrawal/deposit slips, receipts for customers.

OTHER LANGUAGE: Oral skills: conversing with customers; determining their needs.

TRAINING REQUIREMENTS:

PRIOR: High school preferred. Clerical skills, basic math, typing, office machine operations.

CONCURRENT: On-the-job-training: 3 to 4 weeks.

TRAINING AVAILABILITY:

Banking or financial institution. American Institute of Banking offers courses.

EARNINGS:

1980 survey: average earnings:

beginning tellers: $6,760 to $8,320 per year.
newline savings tellers: $7,000 to $9,880 per year.
note tellers: $8,870 to $11,960 per year.
Depend on length of service, location and size of the bank, specific duties. More responsibilities, higher salary.

ADVANCEMENT OPPORTUNITIES:

To full service teller, head teller with experience. Those with some college or specialized training may be promoted to an officer or managerial position.

INTERNATIONAL OPPORTUNITIES:

May be transferred to International Department of bank. Knowledge of other languages helpful in transferring and being promoted.
JOB TITLE: FULL SERVICE TELLER

DUTIES:

- Includes all functions of an "all purpose" teller, which is sometimes divided into separate jobs in large banks.

- Sets up window with currency and coin within authorized cash limit.

- Receives and processes checking and savings deposits. Provides customer with a record of deposit; (records transaction in savings passbook).

- Cashes checks and savings withdrawals within prescribed cash limits; records transaction in savings passbook; closes checking and/or savings accounts.

- Balances teller window daily.

- Receives and processes payments for car and home loans, Master Charge, etc.

- Updates and records savings passbooks upon customer request.

- Answers telephone and written credit rating requests.

- Verifies deposits on home loans.

- Does comebacks and unqualifieds.

- Assists customers in balancing statements and takes bookkeeping calls.

- May include, depending on employer:
  - Selling and redeeming bonds.
  - Accepting and processing tax deposits.
  - Accepting stop payments.
  - Selling Christmas Club accounts.
  - Receiving and processing utility payments.
  - Assisting and processing night deposits; in-mail deposits and credit ratings; sending receipt to customer; crediting customer's account.
  - Preparing and mailing special and hold statements.
  - Processing requests for cash advances on credit cards.
-Selling, recording, balancing money orders, travelers checks and cashiers' checks.

-Processing exchange and foreign currency orders.

-Taking telephone transfer requests from customers and completing proper documentation (transfer of monies from savings to checking).

LANGUAGE SKILLS:

ENGLISH: Oral skills: assisting customers; conversing; telephone skills. Reading and writing skills: filling out forms, receipts; preparing monthly statements.

OTHER LANGUAGE: Oral skills: assisting customers; conversing in person and on the phone.

TRAINING REQUIREMENTS:

PRIOR: High school or equivalent preferred. Basic knowledge of mathematics, bank products, operations, office machines.

CONCURRENT: On-the-job training, about 12 weeks, to learn about bank operations, procedures.

TRAINING AVAILABILITY:

Banking or financial institution.

EARNINGS:

$10,000 to $12,500 per year in large urban areas. Varies by length of service, location, size of bank, range of duties.

ADVANCEMENT OPPORTUNITIES:

With self-improvement efforts, such as enrolling in finance and business courses and satisfactory job performance, can advance to head teller. With some college or specialized training, can move to officer or managerial position.

INTERNATIONAL OPPORTUNITIES:

With advanced training, in the International Division, as calling officers.
JOB TITLE: SAFETY DEPOSIT SUPERVISOR

DUTIES:

- Opens and closes vault, records time of opening and closing in logbook.
- Turns controls to set vault clock for reopening.
- Authorizes forcing, servicing and repair of safety deposit box locks.
- Compiles statistical and tax reports.
- Keeps department records.
- Trains new employees and assigns duties.

LANGUAGE SKILLS:

ENGLISH: Oral skills: training employees; assisting customers. Reading and writing skills: record keeping; report preparation; work schedules.

OTHER LANGUAGE: Oral skills: training employees; assisting customers.

TRAINING REQUIREMENTS:

PRIOR: High school preferable. Good math skills.

CONCURRENT: On-the-job training to learn about operations and procedures specific to the bank.

TRAINING AVAILABILITY: Banking or financial institution.

EARNINGS:

Large urban area:
- Beginning: $8,000 to $8,500 per year.
- Maximum: $13,000 to $14,000 per year.

ADVANCEMENT OPPORTUNITIES:

Head teller; lateral transfers to other departments.

INTERNATIONAL OPPORTUNITIES:

Possible lateral transfer to International Division of a bank with additional training and/or experience.
JOB TITLE: CUSTOMER SERVICE REPRESENTATIVE

DUTIES:

- Interviews prospective and/or existing customers and determines which bank service(s) meet(s) their requirements; provides financial counseling.
- Transfers accounts to other branches; opens new accounts.
- Cross sells and demonstrates bank services to new and existing customers; records daily all cross-selling activities and results.
- Handles loan applications, purchasing of securities, certificates of deposit.
- Processes stop payments; may review verification of stop payment report.
- Sets up automatic deposits on Social Security accounts; opens IRA accounts.
- Orders checks, deposit slips, stamps, etc., for new and existing customers.
- Prepares and mails thank-you letters to customers.
- Maintains check order file for follow up on new customer accounts.
- Prepares and processes input on new accounts and/or changes (e.g., name, address, etc.); reviews output and makes necessary corrections.
- Files new and closed signature cards.
- May assist branch secretary with preparations and typing of loan documents; may type correspondence for platform officers.

LANGUAGE SKILLS:

ENGLISH: Oral skills: interviewing customers; demonstrating bank services; ordering supplies for customers. Reading and writing skills: letter writing; filing cards; preparing new accounts, loan applications.

OTHER LANGUAGE: Oral skills: interviewing customers; demonstrating bank services; ordering supplies for customers.
TRAINING REQUIREMENTS:

PRIOR: Good knowledge of all bank products. Basic knowledge of compliance laws, Personal Cash management, and branch operations and procedures (i.e., stop payments, service charges, etc.). Good typing skills.

CONCURRENT: Some banks provide ongoing training, including seminars.

TRAINING AVAILABILITY:

Programs are offered by various banking associations.

EARNINGS:

$15,000 to $20,000 per year, large urban area.

ADVANCEMENT OPPORTUNITIES:

Operations Manager, Assistant Branch Manager, lateral transfers to other departments.

INTERNATIONAL OPPORTUNITIES:

To International Division of a bank.
JOB TITLE: ASSISTANT BRANCH MANAGER

DUTIES:

- Daily supervision of other employees, e.g., bank tellers, customer service representatives.
- Responsible for operation of branch when manager is gone.
- Assist with duties of tellers and customer service representatives when necessary.

LANGUAGE SKILLS:

ENGLISH: Oral skills: helping customers with problems; supervising employees; telephone skills. Reading and writing skills: record keeping; report preparation.

OTHER LANGUAGE: Oral skills: helping customers with problems; supervising employees; telephone skills.

TRAINING REQUIREMENTS:

PRIOR: High school or equivalent and 1 year of advanced education or training, or, 1-2 years experience as a teller or customer service representative. Math skills.

CONCURRENT: On-the-job training, becoming familiar with new duties and those of the branch manager.

TRAINING AVAILABILITY:

Banking or financial institution.

EARNINGS:

Beginning earnings: $12,000 per year, large urban area. Earnings vary by location and size of bank.

ADVANCEMENT OPPORTUNITIES:

To branch manager, lateral transfers to other departments with additional experience and satisfactory job performance.

INTERNATIONAL OPPORTUNITIES:

Possible with International Division of a bank.
BANKING
CAREER PROGRESSION LADDER

Bank Officers and Managers

Branch Managers

*Assistant Branch Managers

*Customer Service Representatives

*Head Teller (Teller Supervisor)

*Full Service Teller

*Bank Tellers

*Bank Clerks

* = Job descriptions included in this chapter.
## CHAPTER VI

### BUILDING MAINTENANCE AND CONSTRUCTION OCCUPATIONS

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prerequisites for bilingual vocational training project development</td>
<td>47</td>
</tr>
<tr>
<td>Employment projections</td>
<td>47</td>
</tr>
<tr>
<td>Prerequisites for job placement</td>
<td>49</td>
</tr>
<tr>
<td>Actual and projected employment figures</td>
<td>50</td>
</tr>
<tr>
<td>Listing of corporations/organizations</td>
<td>51</td>
</tr>
<tr>
<td>Job descriptions</td>
<td>53</td>
</tr>
<tr>
<td>Building Custodian</td>
<td>53</td>
</tr>
<tr>
<td>Maintenance Worker</td>
<td>55</td>
</tr>
<tr>
<td>Assistant Manager of Building Service:</td>
<td>57</td>
</tr>
<tr>
<td>(Building Supervisor)</td>
<td>57</td>
</tr>
<tr>
<td>Career progression ladder</td>
<td>59</td>
</tr>
</tbody>
</table>
Prerequisites for Bilingual Vocational Training Project Development

This chapter includes job descriptions for the following occupations:

- Building Custodian;
- Maintenance Worker; and,
- Assistant Manager of Building Services (Building Supervisor).

The entry level for this occupation (assistant custodian) has no education, training, or experience requirements. Skills are usually acquired on-the-job or through training programs operated by unions and government agencies. It is an occupation in which training can and is being provided to adults of limited English proficiency. An individual receiving such training would be more likely to be a suitable job applicant than an individual with no prior training, even though there are no entry requirements. The English language skills for which ESL classes could provide instruction and practice include discussing and determining problems with tenants, giving instructions to other workers, reading and using equipment repair manuals. Most custodial jobs are located in large metropolitan areas where there are many office buildings, stores, apartment houses, and building maintenance service companies.

There are good advancement opportunities within the building maintenance and construction occupations with additional training and/or experience. A high school degree (or General Education Diploma) improves an individual's chances for upward mobility.

Employment Projections

The only detailed occupations in this group for which projections of employment are available are janitors and sextons and parking attendants. Employment growth rates to 1990 projected for parking attendants are very sensitive to underlying assumptions of the projections, and range from an increase of 21.6 percent to an increase of 58.1 percent. The projected
growth rate for employment of janitors and sextons is only about 15 percent higher than the average rate for all occupations, yet employment of these persons will provide the highest number of new jobs of any single occupation by 1990 (more than 670,000).
<table>
<thead>
<tr>
<th>Job Title</th>
<th>Education/Training/Experience</th>
<th>Language Skills Required</th>
<th>Other Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building Supervisor</td>
<td>Associate of Arts degree AND 4 yrs. of experience OR Bachelor's degree AND 2 yrs. of experience.</td>
<td>Supervising, recruiting workers.</td>
<td>Ordering supplies, equipment; record keeping; report writing.</td>
</tr>
<tr>
<td>(Asst. Manager)</td>
<td></td>
<td></td>
<td>Supervising, recruiting workers.</td>
</tr>
<tr>
<td>Maintenance Worker</td>
<td>2 yrs. of vocational/trade school training AND 2 yrs. of experience OR 3 yrs. of experience.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Job titles are listed in order of advancement. Further details are provided in the job descriptions for each job title. Additional job titles are included on the career progression ladder to show advancement opportunities.
Table 4

Employment in Building Maintenance and Construction Occupations
Actual 1978 and Projected 1990*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL OCCUPATIONS COMBINED</td>
<td>97,610</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>L: +22.5</td>
<td>M: +24.4</td>
<td>H: +31.0</td>
</tr>
<tr>
<td>Crafts and Related Workers</td>
<td>11,679</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>L: 14,366</td>
<td>M: 14,668</td>
<td>H: 15,555</td>
</tr>
<tr>
<td></td>
<td>L: +23.0</td>
<td>M: +25.6</td>
<td>H: +33.2</td>
</tr>
<tr>
<td>Construction Craftworkers</td>
<td>2,950</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>L: 3,747</td>
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<td></td>
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<td>H: +36.9</td>
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<tr>
<td>SERVICE WORKERS</td>
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<td>L: +31.4</td>
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<td>H: +39.3</td>
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<tr>
<td>Janitors and Sextons</td>
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<td></td>
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<td></td>
<td>L: 3,257</td>
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<td>M: +28.3</td>
<td>H: +25.5</td>
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<tr>
<td>OPERATIVES</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>L: 16,399</td>
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<td>M: +16.8</td>
<td>H: -24.6</td>
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<tr>
<td>TRANSPORT EQUIPMENT OPERATIVES</td>
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<td></td>
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<tr>
<td></td>
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<td>H: +27.7</td>
</tr>
<tr>
<td>Parking Attendants</td>
<td>37</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>L: 44</td>
<td>M: 58</td>
<td>H: 51</td>
</tr>
<tr>
<td></td>
<td>L: +21.6</td>
<td>M: +58.1</td>
<td>H: +40.2</td>
</tr>
</tbody>
</table>

*Employment projections are based on data from the U.S. Bureau of Labor Statistics. For each industry, employment in 1978 is shown, and three series of employment projections are shown for 1990: Low (L), Medium (M) and High (H). For comparison, projections also are shown (in capital letters) for all occupations combined and for the major occupational groups of which the occupations studied are a part. The projections are explained and additional detail is provided in Appendix A.
BUILDING MAINTENANCE AND CONSTRUCTION OCCUPATIONS
LISTING OF CORPORATIONS/ORGANIZATIONS

DATA SOURCES

- American Building & Maintenance Corporation, Washington, D.C.
- Hyatt Regency Hotel, Washington, D.C.
- San Franciscan Hotel, CA
- St. Mary's Hospital and Medical Center, CA
- Waldorf – Astoria Hotel, NY

ADDITIONAL INFORMATION

- Employment opportunities:
  - AFL - CIO
    Building & Construction Trades Department
    815 16th Street, N.W.
    Washington, D.C. 20006
  - Associated General Contractors of America, Inc.
    1957 E Street, N.W.
    Washington, D.C. 20006
  - National Association of Home Builders
    15th & M Streets, N.W.
    Washington, D.C. 20005

- Apprenticeship, training opportunities:
  - Local construction firms
  - Employer associations
  - State apprenticeship agency
  - Local office of Bureau of Apprenticeship & Training,
    U.S. Department of Labor

CORPORATION/AGENCY LISTING JOB OPPORTUNITIES

- Construction
  LOCATION
  Los Angeles, CA
JOB TITLE: BUILDING CUSTODIAN

DUTIES:

- Fixes leaky faucets, empties trash, does minor painting and carpentry.
- Replenishes bathroom supplies, mows lawns.
- Wet or dry mops floors, vacuums carpets, dusts furniture.
- Makes minor repairs, exterminates insects and rodents.
- Supervises a group of custodial workers; assigns tasks to each worker.

LANGUAGE SKILLS:

ENGLISH: Oral skills: finding out problems from tenants; following instructions; supervising a group of workers. Reading skills: instructions; repair manuals.

OTHER LANGUAGE: Oral skills: finding out problems from tenants; following instructions; supervising a group of workers.

TRAINING REQUIREMENTS:

PRIOR: High school helpful, but not required. Some simple arithmetic knowledge needed and courses for minor plumbing and carpentry work useful.

CONCURRENT: On-the-job training.

TRAINING AVAILABILITY:

In some cities, unions and government agencies have developed programs to teach custodial skills. In-house: maintenance organizations.

EARNINGS:

1978: average earnings: $8,700 per year.

ADVANCEMENT OPPORTUNITIES:

Limited. Where there is a large maintenance staff, custodians can be promoted to supervisory jobs.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: MAINTENANCE WORKER

DUTIES:

- Maintains, adjusts and makes minor repairs to building hardware.
- Replaces broken window and door glass.
- Repairs windows and sash.
- Makes minor repairs to woodwork, flooring and walls.
- Makes minor repairs to building electrical, plumbing and heating systems.
- Assists in relocating building equipment as directed.
- Keeps job and other records.

LANGUAGE SKILLS:

ENGLISH: Oral skills: following instructions; determining problems; conversing with tenants. Reading and writing skills: repair manuals; safety teams.

OTHER LANGUAGE: Oral skills: following instructions; determining problems; conversing with tenants.

TRAINING REQUIREMENTS:

PRIOR: Three years of full-time paid experience of a nature to qualify for the duties of the position; or two years of such experience and 2 years of vocational or trade school training.

CONCURRENT: Union membership may be required in some areas.

TRAINING AVAILABILITY:

In-house training.

EARNINGS:

Public day care centers: $6,000 to $7,000 per year.
Large urban area: $9,400 to $11,000 per year, average.
ADVANCEMENT OPPORTUNITIES:

To maintenance supervisor.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: ASSISTANT MANAGER OF BUILDING SERVICES
(BUILDING SUPERVISOR)

DUTIES:

- Participates in development and implementation of operational controls, policies, procedures and studies or special reports for housekeeping, sanitation, elevator operation and laundry services.

- Assists in developing and establishing operating policies and procedures for areas under his/her jurisdiction.

- Supervises and evaluates functional activities and provides recommendations for improvement of operations.

- Inspects areas to insure compliance with operating procedures and that safety regulations are observed.

- Prepares requisitions for new and replacement material and equipment and instructs personnel in use of new equipment supplies.

- Develops, supervises and evaluates training program for personnel under his/her jurisdiction.

- Develops and evaluates performance standards and productivity for goals for those services for which he/she is responsible.

- Recruits, selects, assigns and evaluates performance of staff.

- When assigned to tour of duty, directs staff during tour and responds to emergencies, keeping manager fully informed of developments.

- Prepares activity and special reports.

- Coordinates activities of his/her services with other services.

- Assists in preparation of budget requests and estimates.

- Participates in staff meetings and conferences and represents the manager in all phases of his delegated duties and responsibilities.

LANGUAGE SKILLS:

ENGLISH: Oral skills: supervising workers; working with tenants to solve problems; participating in staff meetings, conferences; recruiting, training, assigning workers. Reading and writing skills: developing training program, policies, procedures; report writing; ordering materials, equipment.
OTHER LANGUAGE: Oral skills: supervising workers; participating in staff meetings; working with tenants; recruiting, training, assigning workers.

TRAINING REQUIREMENTS:

PRIOR: Associate of Arts Degree in Institutional Management from an approved 2-year college course and a minimum of four years of supervisory experience in institutional service management covering sanitation, linen and laundry service or building maintenance; or B.S. in Business Administration or allied fields from an accredited college or university, and two years of responsible supervisory and administrative experience in institutional management; or satisfactory equivalent combination of education, training and experience.

CONCURRENT: On-the-job training.

TRAINING AVAILABILITY:

In-house.

EARNINGS:

$18,900 to $25,650 per year, large urban area.

ADVANCEMENT OPPORTUNITIES:

Limited; may advance to full manager, or area manager of buildings.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
BUILDING MAINTENANCE AND CONSTRUCTION
CAREER PROGRESSION LADDER

Managerial Positions

Area Supervisor

*Building Supervisor
(Assistant Manager, Building Services)

*Custodian
(Janitor)

Assistant Custodian

* = Job descriptions included in this chapter.
Prerequisites for Bilingual Vocational Training Project Development

Detailed job descriptions for thirteen occupations are included in this chapter. These are:

- Kitchen Helper;
- Dietary Aide (Kitchen Helper);
- Institutional Aide;
- Waiter's Assistant;
- Steward (Set-Up Worker);
- Food Counter Worker;
- Waiter/Waitress;
- Host/Hostess;
- Cook's Helper (Pantry Person);
- Captain (Assistant Maitre d'Hotel);
- Bartender and Bartender's Helper;
- Cook;
- Lead Cook (Head Chef); and,
- Supervisor, Food Service Personnel.

No prior training or experience is required for the entry level positions, e.g., Kitchen Helper, Waiter's Assistant, Institutional Aide. Training programs are available for cooks and chefs, however, including apprenticeship programs. Language skills in both English and other languages are especially important for those employees who have direct contact with the customer or guest. In some cases, e.g., where a restaurant specializes in a particular cuisine, the need for English may be decreased. Conversing with customers and other employees and understanding and carrying out instructions are English skills that should be stressed if training is provided in this occupation.

The educational requirements for this occupation are high; two to three years of high school are preferred for waiter/waitresses, and completion of the eighth grade is necessary for cooks, chefs, and supervisors. There are good opportunities for advancement, which primarily depends on experience in the food service industry. For managerial positions, completion of a college program is extremely important. Trainees with little formal education need not be screened out of the training program.
It would be helpful to incorporate some form of practical or on-the-job experience into the program, giving bilingual vocational training graduates a head start over other job applicants. Menu planning, food cost control, purchasing large quantities of food supplies, hotel and restaurant sanitation and public health rules are all important competencies or skills for trainees to acquire.

Beginning wages for the food service occupations are, in general, very low. For many of the jobs, however, employees receive tips, which can considerably increase earnings.

Jobs for the food service occupations are primarily located in large cities and tourist areas and may be seasonal. The principal union organizing workers in this occupation is the Hotel Employees and Restaurant Employees International Union (AFL-CIO).

**Employment Projections**

The projected rates of increases of employment in food service and restaurant occupations in 1990 are substantially higher than the average rate for all occupations. The fastest growing segment of this group (about three times the average for all occupations) will be food preparation and service workers in fast food restaurants. Nearly 500,000 will be added in this occupation, while another 500,000 jobs will become available for waiters and waitresses and about 300,000 for kitchen helpers.
# TABLE 5

## FOOD SERVICE OCCUPATIONS

### Prerequisites for Job Placement

<table>
<thead>
<tr>
<th>Job Title</th>
<th>Education</th>
<th>Training/Experience</th>
<th>Language Skills Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervisor, Food Service Personnel</td>
<td></td>
<td>Experience as a cook or chef.</td>
<td>Oral: English;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Reading/Writing:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Other Language:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Oral: English;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Reading/Writing:</td>
</tr>
<tr>
<td>Chef</td>
<td>Completion of 8th grade</td>
<td>Course in basic cooking principles and experience as a cook's helper.</td>
<td>Oral: English;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Reading/Writing:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Other Language:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Oral: English;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Reading/Writing:</td>
</tr>
<tr>
<td>Cook</td>
<td></td>
<td></td>
<td>Oral: English;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Reading/Writing:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Other Language:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Oral: English;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Reading/Writing:</td>
</tr>
<tr>
<td>Asst. Cook (Cook's Helper)</td>
<td></td>
<td>Home economics courses, experience as a kitchen helper helpful but not required.</td>
<td>Oral: English;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Reading/Writing:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Other Language:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Oral: English;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Reading/Writing:</td>
</tr>
<tr>
<td>Kitchen Helper</td>
<td>None</td>
<td>None</td>
<td>Oral: English;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Reading/Writing:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Other Language:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Oral: English;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Reading/Writing:</td>
</tr>
<tr>
<td>Captain (Asst. Maitre d'Hôtel)</td>
<td></td>
<td>Experience as a waiter/waitress.</td>
<td>Oral: English;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Reading/Writing:</td>
</tr>
<tr>
<td>Host/Hostess</td>
<td>Some high school (2 to 3 years) preferred</td>
<td>Experience as a waiter/waitress preferred.</td>
<td>Oral: English;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Reading/Writing:</td>
</tr>
<tr>
<td>Waiter/Waitress</td>
<td></td>
<td></td>
<td>Oral: English;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Reading/Writing:</td>
</tr>
<tr>
<td>Waiter's Assistant</td>
<td>None</td>
<td>None</td>
<td>Oral: English;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Reading/Writing:</td>
</tr>
</tbody>
</table>

Job titles are listed in order of advancement. Further details are provided in the job descriptions for each job title. Additional job titles are included in the career progression ladder to show advancement opportunities.


Table 6

Employment in Food Service Occupations
Actual 1978 and Projected 1990*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1978</td>
<td>1990</td>
</tr>
<tr>
<td>ALL OCCUPATIONS COMBINED</td>
<td>97,610</td>
<td></td>
</tr>
<tr>
<td></td>
<td>L: 119,590</td>
<td>M: 121,447</td>
</tr>
<tr>
<td></td>
<td>+22.5</td>
<td>+24.4</td>
</tr>
<tr>
<td>PROFESSIONAL, TECHNICAL AND RELATED WORKERS</td>
<td>15,570</td>
<td></td>
</tr>
<tr>
<td></td>
<td>L: 20,038</td>
<td>M: 20,295</td>
</tr>
<tr>
<td></td>
<td>+28.7</td>
<td>+30.3</td>
</tr>
<tr>
<td>MANAGERS, OFFICIALS, AND PROPRIETORS</td>
<td>8,802</td>
<td></td>
</tr>
<tr>
<td></td>
<td>L: 10,444</td>
<td>M: 10,677</td>
</tr>
<tr>
<td></td>
<td>+19.1</td>
<td>+21.3</td>
</tr>
<tr>
<td>Restaurant, Cafe, and Bar Managers</td>
<td>499</td>
<td></td>
</tr>
<tr>
<td></td>
<td>L: 642</td>
<td>M: 650</td>
</tr>
<tr>
<td></td>
<td>+28.7</td>
<td>+30.3</td>
</tr>
<tr>
<td>SERVICE WORKERS</td>
<td>14,414</td>
<td></td>
</tr>
<tr>
<td></td>
<td>L: 18,946</td>
<td>M: 19,220</td>
</tr>
<tr>
<td></td>
<td>+31.4</td>
<td>+33.3</td>
</tr>
<tr>
<td>FOOD SERVICE WORKERS</td>
<td>5,610</td>
<td></td>
</tr>
<tr>
<td></td>
<td>L: 7,774</td>
<td>M: 7,827</td>
</tr>
<tr>
<td></td>
<td>+38.6</td>
<td>+39.5</td>
</tr>
<tr>
<td>Bartenders</td>
<td>714</td>
<td></td>
</tr>
<tr>
<td></td>
<td>L: 453</td>
<td>M: 457</td>
</tr>
<tr>
<td></td>
<td>+30.4</td>
<td>+31.6</td>
</tr>
</tbody>
</table>

*Employment projections are based on data from the U.S. Bureau of Labor Statistics. For each industry, employment in 1978 is shown, and three series of employment projections are shown for 1990: Low (L), Medium (M) and High (H). For comparison, projections also are shown (in capital letters) for all occupations combined and for the major occupational groups of which the occupations studied are a part. The projections are explained and additional detail is provided in Appendix A.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1978</td>
<td>1990</td>
</tr>
<tr>
<td>Cooks (including institutional, restaurant, and short order/specialty fast food)</td>
<td>1,024</td>
<td>1,367</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food Preparation and Service Workers, Fast Food Restaurant</td>
<td>714</td>
<td>1,206</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hosts/Hostesses, Restaurant/Lounge/Coffee Shop</td>
<td>104</td>
<td>154</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kitchen Helpers</td>
<td>771</td>
<td>1,072</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pantry, Sandwich, and Coffee Makers</td>
<td>64</td>
<td>92</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waiters/Waitresses</td>
<td>1,539</td>
<td>2,071</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waiters' Assistants</td>
<td>252</td>
<td>363</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
FOOD SERVICE OCCUPATIONS
LISTING OF CORPORATIONS/ORGANIZATIONS

DATA SOURCES

- Fairfax Hospital, Va
- Gouverneur Hospital, NY
- Hyatt Regency Hotel, Washington, D.C.
- Marriott Corporation, Washington, D.C.
- San Franciscan Hotel, CA
- St. Mary's Hospital and Medical Center, CA
- Waldorf - Astoria Hotel, NY

ADDITIONAL INFORMATION

- General information:
  --National Institute for the Foodservice Industry
     20 N. Wacker Drive
     Suite 2620
     Chicago, IL 60606
  --Service Employees International Union
     2020 K Street, N.W.
     Washington, D.C. 20006
  --Culinary Institute of America
     P.O. Box 53
     Hyde Park, NY 12538

- Apprenticeship program for cooks and chefs:
  --American Culinary Federation
     P.O. Box 3466
     St. Augustine, FL 32084

- Directory of colleges, schools with hospitality education programs, courses:
  --Council on Hotel, Restaurant, and Institutional Education
     Human Development Building
     Room 118
     University Park, PA 16802

- Employment opportunities:
  --Local employers
  --State employment service office
<table>
<thead>
<tr>
<th>CORPORATION/AGENCY LISTING JOB OPPORTUNITIES</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>• H.S.T. Restaurant</td>
<td>New York, NY</td>
</tr>
<tr>
<td>• Hunan Royal Restaurant</td>
<td>New York, NY</td>
</tr>
<tr>
<td>• Joy Fok Restaurant</td>
<td>New York, NY</td>
</tr>
<tr>
<td>• Mendles and Abraham Restaurant</td>
<td>New York, NY</td>
</tr>
</tbody>
</table>
JOB TITLE: KITCHEN HELPER

DUTIES:

- Cleans food preparation and storage areas.
- Sweeps and scrubs floors.
- Removes garbage, separating trash.
- Scrapes food from plates, stacks them in a dishwasher, cleans silverware, removes water spots from glasses.
- May include, depending on type of employer:
  - Moving supplies and equipment from storage to work areas.
  - Performing some easy food preparation functions.
  - Washing pots and pans used in cooking.

LANGUAGE SKILLS:

ENGLISH: Oral skills: conversing with customers; understanding and carrying out instructions.

OTHER LANGUAGE: Oral skills: conversing with customers; understanding and carrying out instructions.

TRAINING REQUIREMENTS:

PRIOR: High school not required.

CONCURRENT: On-the-job training.

TRAINING AVAILABILITY:

In-house: large restaurant and hotel training divisions.

EARNINGS:

1980 survey:

In restaurants and bars in large cities: $6,968 to $10,192 per year.

ADVANCEMENT OPPORTUNITIES:

Very limited. Occasionally advance to cook's helper or short-order cook.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: DIETARY AIDE (KITCHEN HELPER)

DUTIES:

- Works in a hospital or other health care facility.
- Assembles prepared food on trays for patients on regular or modified diets according to menu cards or special diet lists.
- Delivers trays and carts to patients and collects soiled trays for return to kitchen area and cleaning.
- Prepares and serves between-meal nourishment for patients.
- Prepares cold foods such as salads, sandwiches, desserts according to oral and/or written instructions.
- Collects and places garbage and trash in designated containers.
- Reconstitutes hot foods in microwave ovens.
- Obtains stock from refrigerators and storerooms, loads and unloads stock, and dispatches and stores supplies.
- Washes dishes and cleans equipment in work areas.
- Assists in cooking operations.
- Collects dishes and resets tables when assigned to staff food service operations.
- Organizes serving area and participates in food service operations when assigned to a cafeteria or dining room area.
- Participates in daily menu conferences, dietary and sanitary matters and cleaning assignments.
- Attends in-service education programs as assigned.
- May operate self-service elevators to deliver food trucks to and from patient floors.
- Collects nourishment requisitions and diet lists, makes diet changes for patient menus.
- Maintains adequate supply of all menus; counts, heads, distributes, picks up and modifies menus.
- Tallies menus, records amount and posts all projection sheets and short order sheets.
- Visits patients, assists in menu selection if needed, checks completed menus for appropriate selections and nutritional adequacy.

- Keeps patient discharged diet card filing up-to-date; keeps other filing cabinets stocked with needed supplies and in proper order.

LANGUAGE SKILLS:

ENGLISH: Oral skills: answering and responding to phone messages and requests; following instructions; conversing with patients. Reading and writing skills: to understand and carry out simple instructions.

OTHER LANGUAGE: Oral skills: answering and responding to phone messages and requests; conversing with patients.

TRAINING REQUIREMENTS:

PRIOR: High school preferable, required in some places. Food service experience, knowledge of nutrition and clerical skills highly desirable.

CONCURRENT: On-the-job training, several weeks. Union membership may be required in some areas.

TRAINING AVAILABILITY:

In-house: hospital or health care facility.

EARNINGS:

$6,500 to $10,000 per year, large urban area.

ADVANCEMENT OPPORTUNITIES:

Cook, supervisory positions with experience.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: INSTITUTIONAL AIDE

DUTIES:

- Cleans kitchen and dining areas.
- Helps load, unload, and store supplies.
- Is responsible for garbage disposal and sanitation.
- Assists in dishwashing and in the preparation of food.
- Organizes the serving area, participates in food service, collects dishes and resets tables in a cafeteria or dining room.

LANGUAGE SKILLS:

ENGLISH: Oral skills: understanding and carrying out instructions; assisting food preparation workers.

OTHER LANGUAGE: Oral skills: understanding and carrying out instructions; assisting food preparation workers.

TRAINING REQUIREMENTS:

PRIOR: None.

CONCURRENT: Union membership may be required in some areas.

TRAINING AVAILABILITY:

In-house: hospital or health care facility.

EARNINGS:

$6,500 to $13,000 per year, large urban area.

ADVANCEMENT OPPORTUNITIES:

With experience and satisfactory job performance, to cook's helper, cook.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: WAITER'S ASSISTANT

DUTIES:

- Clears and resets table.
- Carries soiled dishes to dishwashing area.
- Brings in trays of food.
- Cleans up spilled food and broken dishes.
- May serve water and bread and butter to customers.
- Does various other jobs, such as refilling salt and pepper shakers, cleaning coffee pots.

LANGUAGE SKILLS:

ENGLISH: Oral skills: greeting, conversing with customers; understanding and carrying out instructions.

OTHER LANGUAGE: Oral skills: greeting, conversing with customers; understanding and carrying out instructions.

TRAINING REQUIREMENTS:

PRIOR: High school not required. Ability to read, write and do simple arithmetic required.

CONCURRENT: On-the-job training.

TRAINING AVAILABILITY:

In-house: large restaurant and hotel training division.

EARNINGS:

1980 survey:

In restaurants and bars in large cities: $6,240 to $7,820 per year, plus tips.

ADVANCEMENT OPPORTUNITIES:

Very limited. Sometimes advance to positions as waiter or waitress.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: STEWARD (SET-UP WORKER)

DUTIES:

- Plans and organizes all china, glass and silver to be used at banquet functions.
- Assists the Chef's department on the preparation of all food items used at a banquet function.
- Insures that all food and non-food items used at the banquet function arrive at the proper location at the proper time.
- Coordinates with banquet manager and chef's department.
- Keeps informed of all upcoming banquet functions.
- Maintains cleanliness and repair on all banquet equipment and in banquet rooms.

LANGUAGE SKILLS:

ENGLISH: Oral skills: assisting chef; coordinating with banquet manager.

OTHER LANGUAGE: Oral skills: assisting chef; coordinating with banquet manager.

TRAINING REQUIREMENTS:

PRIOR: Banquet experience.

CONCURRENT: On-the-job training with an experienced steward.

TRAINING AVAILABILITY:

In-house: large hotel and restaurant training divisions.

EARNINGS:

Varies by employer. Specific wages not available.

ADVANCEMENT OPPORTUNITIES:

May be promoted to (Asst.) Executive Steward, Food and Beverage Director, with experience.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: FOOD COUNTER WORKER

DUTIES:

- Takes customers' orders; serves food and beverages.
- Makes out checks and takes payments; makes changes.
- Cooks, makes sandwiches, serves cold drinks.
- Cleans kitchen equipment, sweeps and mops floors and carries out trash.
- In a cafeteria, supplies serving lines with desserts, salads, etc. as well as fills customers' plates.

LANGUAGE SKILLS:

ENGLISH: Oral skills: conversing with customers; describing foods available. Reading and writing skills: taking orders; making out checks.

OTHER LANGUAGE: Oral skills: conversing with customers; describing foods available.

TRAINING REQUIREMENTS:

PRIOR: High school preferred but not necessary; basic math skills important; operating cash register.

CONCURRENT: On-the-job training, observing and working with more experienced workers. Health certificate often required.

TRAINING AVAILABILITY:

Large chains operate formal management training programs, while others offer informal on-the-job training. Some employers use self-study instructional booklets and audio-visual aids to train new employees.

EARNINGS:

1980: $5,200 to $8,600 per year, plus tips, in diners and drugstores, large urban area.

Usually, counter workers receive free meals at work and uniforms.

ADVANCEMENT OPPORTUNITIES:

Limited in small eating places; higher paying jobs, learn new skills by transferring to a larger restaurant. Advancement to cashier, cook, waiter/waitress, counter or fountain supervisor; in cafeterias, to line supervisor or merchandiser.
INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: WAITER/WAITRESS

DUTIES:

- Serves food to customers at counters or tables.
- Presents menu, may suggest courses or wines, answers questions regarding food preparation, takes order, relays order to kitchen.
- Serves courses from kitchen and service bars.
- Totals bill and accepts payment or refers customer to cashier.
- Observesiners to fulfill additional requests and to perceive when meal has been completed.
- May toss salads, carve meats, portion pies and desserts, brew coffee, prepare flaming dishes and desserts at customer's table.
- May clear and reset tables.

LANGUAGE SKILLS:

ENGLISH: Oral skills: greeting customers; assisting in course selection; describing dishes; answering questions. Reading and writing skills: taking orders; presenting menu.

OTHER LANGUAGE: Oral Skills: greeting customers; assisting in and describing course selection, especially in restaurants specializing in foreign foods; answering questions.

TRAINING REQUIREMENTS:

PRIOR: Preferably 2 to 3 years of high school (and at least 3 months of experience in larger hotels and restaurants). Basic math skills for computing bill.

CONCURRENT: Usually on-the-job training with an experienced waiter/waitress. Health certificate required in most States.

TRAINING AVAILABILITY:

Some public and private vocational schools, restaurant associations, large restaurant chains provide classroom instruction. Some employers use self-instruction programs which often contain film strips and instructional booklets.
EARNINGS:

1980: average earnings:
starting: $4,240 to $7,500 per year, plus tips.

ADVANCEMENT OPPORTUNITIES:

To cashier, head waiter/waitress, hostess, bartender, maitre d'hotel, or supervisory positions.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: HOST/HOSTESS

DUTIES:

- Greets guests professionally and courteously.
- Escorts guests to tables, may provide menus.
- Establishes an even and orderly flow of customers into restaurant.
- Inspects serving stations for neatness and cleanliness.
- Requisitions table linens and other supplies for tables and serving stations.
- Supports waiters/waitresses whenever needed.
- May include, depending on place of employment:
  - Assisting in scheduling work hours, keeping time records of workers.
  - Collecting and recording daily revenues.
  - Dressing tables.
  - Training waiters/waitresses.

LANGUAGE SKILLS:

ENGLISH: Oral skills: greeting guests; training, supervising staff; ordering supplies. Reading and writing skills: ordering supplies; record keeping.

OTHER LANGUAGE: Oral skills: greeting guests; training, supervising staff.

TRAINING REQUIREMENTS:

PRIOR: Preferably experience as a waiter/waitress.

CONCURRENT: On-the-job training, e.g., working with catering manager, reviewing all functions daily first two weeks, weekly contact for the following three weeks.

TRAINING AVAILABILITY:

In-house: large restaurant and hotel training divisions.
EARNINGS:

Minimum earnings range from $7,700 to $9,600 per year, plus tips; maximum earnings from $10,000 to $14,000 per year, plus tips, in restaurant or hotel chains. Higher pay in large restaurants or cocktail lounges.

ADVANCEMENT OPPORTUNITIES:

To (assistant) maitre d'hôtel, supervisory positions.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: COOK'S HELPER (PANTRY PERSON)

DUTIES:
- Assists workers engaged in preparing foods.
- Performs simple food preparation tasks, e.g. washing, peeling, cutting, grinding, stirring, straining.
- Weighs and measures ingredients.
- Stores food, utilizing knowledge of temperature requirements and spoilage.
- Carries equipment.
- Cleans work areas and equipment.
- Segregates and removes garbage.

LANGUAGE SKILLS:

ENGLISH: Oral skills: assisting co-workers; following directions and instructions. Reading and writing skills: weighing and measuring ingredients.

OTHER LANGUAGE: Oral skills: assisting co-workers; following directions and instructions.

TRAINING REQUIREMENTS:

PRIOR: None. Home economics courses can be helpful.

CONCURRENT: On-the-job training. Health certificate required in most States.

TRAINING AVAILABILITY:

Training divisions at various hotels as well as those programs sponsored by Federal agencies and State employment service offices.

EARNINGS:

Approximately $7,000 per year.

ADVANCEMENT OPPORTUNITIES:

To cook with experience.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: CAPTAIN (HEAD WAITER/WAITRESS; ASST. MAITRE d'HOTEL)

DUTIES:

- Supervises and coordinates activities of dining room employees engaged in providing courteous and rapid service to diners.
- Greets guests, escorts them to tables.
- Describes or suggests food courses and wine.
- Schedules dining reservations on telephone.
- Arranges parties or special services for diners.
- May respond to complaints regarding food or service.
- Trains dining room employees, directs performance.
- May prepare work schedules and time records.
- Assigns duties, work stations and responsibilities; authorizes personnel to work overtime.
- Requisitions supplies.
- Inspects dining tables and work areas for cleanliness.

LANGUAGE SKILLS:

ENGLISH: Oral skills: supervising workers; telephone skills--making dining reservations; handling complaints. Reading and writing skills: ordering supplies; preparing work schedules, time records.

OTHER LANGUAGE: Oral skills: supervising workers; telephone skills--making dining reservations; handling complaints.

TRAINING REQUIREMENTS:

PRIOR: Experience as a waiter/waitress.

CONCURRENT: On-the-job training.

TRAINING AVAILABILITY:

In-house: large restaurant and hotel training divisions.
EARNINGS:

Minimum earnings range from $9,000 to $12,000 per year; maximum earnings range from $12,500 to $15,600 per year. May include tips depending on place of employment.

ADVANCEMENT OPPORTUNITIES:

May advance to maitre d'hotel, supervisory or managerial positions.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: BARTENDER AND BARTENDER HELPER

DUTIES:

- Mixes and serves alcoholic and nonalcoholic drinks to patrons of bar, following standard recipes.
- Must know numerous drink recipes, be able to mix drinks accurately by sight alone.
- Collects money for drinks served; makes change.
- Prepares orders or requisitions liquors and supplies.
- Places bottled goods and glasses to make an attractive display.
- May prepare garnishes.
- May own a tavern or bar and may keep own business records, hire, train and direct staff.

Bartender Helper

- Keeps bar supplied with liquor, mixes, and ice.
- Stocks refrigerators with beer and wine.
- Replaces empty beer kegs with full ones.
- Keeps bar and equipment clean and removes empty bottles and trash.
- Slices and pits fruit used to garnish drinks.
- May mix and prepare flavors for mixed drinks.

LANGUAGE SKILLS:

ENGLISH: Oral skills: conversing with customers; instructing, supervising staff. Reading and writing skills: record keeping; preparing orders, requisitions; recipes.

OTHER LANGUAGE: Oral skills: conversing with customers; instructing, supervising staff.

TRAINING REQUIREMENTS:

PRIOR: None required. Short courses in bartending helpful. Can gain experience as bartender's helper, waiter/waitress.

CONCURRENT: On-the-job training. Must be at least 21 years of age. Health certificates required by some States.
TRAINING AVAILABILITY:

Some schools offer short courses in bartending.

EARNINGS:

1980: average earnings:

Bartender: $9,700 to $15,700 per year, plus tips.

Bartender Helper: $7,000 per year, plus tips. (minimum wage)

ADVANCEMENT OPPORTUNITIES:

Limited opportunities. May advance to head bartender, wine steward, beverage manager, host/hostess.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: COOK

DUTIES:

- Reads menu cards to estimate food requirements, and
  procures from storage.

- Prepares or supervises the washing, trimming, cooking and
  seasoning of all food items.

- Utilizes a variety of kitchen utensils and equipment such
  as blenders, mixers, grinders, slicers, tenderizers, in
  the preparation and cooking of foods.

- Prepares food utilizing such equipment as steam kettles,
  grills, and ovens, and maintains correct temperatures for
  all foods.

- Tastes foods for consistency and seasoning and corrects
  as necessary to assure proper flavor and texture.

- Apportions servings and prepares or directs the
  preparation and distribution of food to serving areas.

- Inspects foods and meats in work and storage areas for
  compliance with storage, safety and sanitary standards.

- May instruct and supervise other kitchen employees and
  assist in orientation and in-service training programs.

- May participate in daily menu conferences and confer with
  supervisor concerning menus, food preparation, quality
  recipes, use of leftovers and related matters.

LANGUAGE SKILLS:

ENGLISH: Oral skills: understanding and carrying out
instructions; supervising and instructing other kitchen
employees; conferring with supervisor. Reading and
writing skills: recipes, menus, food preparation.

OTHER LANGUAGE: Oral skills: understanding and carrying
out instructions; supervising and instructing other
kitchen employees.

TRAINING REQUIREMENTS:

PRIOR: Completion of eighth (8) grade, basic math skills
for converting recipes, and a formal course in basic
cooking principles; and Department of Health Food
Protection Course Certificate; and Experience as Cook's
helper, or satisfactory equivalent combination of
education, experience and training.
CONCURRENT: On-the-job training. Union membership may be required in some areas.

TRAINING AVAILABILITY:

High school and post-high school vocational programs. Apprenticeship programs through trade unions, professional associations; 3-year program administered by The American Culinary Federation.

EARNINGS:

1980: average earnings:

Range: $10,200 to $15,200 per year.

ADVANCEMENT OPPORTUNITIES:

Head cook, (asst.) chef, supervisory or management positions, instructors. Advancement by moving from one operation to another.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: COOK, LEAD (HEAD CHEF)

DUTIES:
- All of the duties listed under Cook (p. 93), and:
- Directs and coordinates activities of workers engaged in preparing, cooking and serving food.
- Plans menus.
- Estimates daily or weekly needs.
- Orders food supplies and equipment.
- Keeps daily record of meals served.
- Keeps inventory of supplies and equipment.
- May participate in preparing and cooking meals, menu planning, pricing.

LANGUAGE SKILLS:

ENGLISH: Oral skills: directing workers; giving instructions; ordering supplies, equipment. Reading and writing skills: planning menus; keeping an inventory.

OTHER LANGUAGE: Oral skills: directing workers; giving instructions.

TRAINING REQUIREMENTS:

PRIOR: Experience as a cook--number of years varies by employer.

CONCURRENT: Union membership may be required in some areas.

TRAINING AVAILABILITY:

See Cook (p. 94).

EARNINGS:

Minimum earnings range from $10,000 to $13,500 per year; maximum earnings range from $14,000 to $13,000 per year.
ADVANCEMENT OPPORTUNITIES:

To supervisory or management positions within food and beverage divisions of hotels; instructors.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: SUPERVISOR, FOOD SERVICE PERSONNEL

DUTIES:

- Supervises, trains and coordinates activities of kitchen or dining room personnel.
- Assists manager in planning, scheduling, record keeping.
- Coordinates inventory, storage and distribution of food items and supplies.

LANGUAGE SKILLS:

ENGLISH: Oral skills: supervising, training staff; assisting manager with scheduling. Reading and writing skills: record keeping.

OTHER LANGUAGE: Oral skills: supervising, training staff.

TRAINING REQUIREMENTS:

PRIOR: Experience as a cook or chef--number of years varies by employer.

CONCURRENT: On-the-job experience.

TRAINING AVAILABILITY:

In-house: large restaurant and hotel training divisions.

EARNINGS:

Minimum earnings range from $10,400 to $13,500 per year; maximum from $14,200 to $17,700 per year.

ADVANCEMENT OPPORTUNITIES:

To managerial positions.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
FOOD SERVICE
CAREER PROGRESSION LADDER

Managerial Positions

Assistant Manager

*Supervisor, Food Service Personnel

* = Job descriptions included in this chapter.
CHAPTER VIII

HEALTH CARE OCCUPATIONS

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<th>Page</th>
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</thead>
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<td>Electroencephalographic (EEG) Technologist</td>
<td>159</td>
</tr>
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<td>Supervising Medical Records Librarian</td>
<td>161</td>
</tr>
<tr>
<td>Hospital Care Investigator</td>
<td>163</td>
</tr>
<tr>
<td>Senior Hospital Care Investigator</td>
<td>165</td>
</tr>
<tr>
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<td>167</td>
</tr>
</tbody>
</table>
HEALTH CARE OCCUPATIONS

Prerequisites for Bilingual Vocational Training Project Development

Job descriptions for twenty-five health care occupations are presented in this section. These include a variety of aides and clerks, assistants, technicians and technologists who perform routine, essential chores to assist physicians, dentists and optometrists. The use of auxiliary personnel is becoming more widespread, enhancing employment opportunities.

For most of the health care jobs, a high school education or the equivalent is preferred by most employers. Workers can receive on-the-job training for many of these positions or can attend 1- or 2-year training programs which are offered by community and junior colleges, private vocational or technical institutes, colleges and universities. Public health, police, and fire departments, as well as hospitals, medical schools, colleges and universities, offer training for Emergency Medical Technicians. Although technicians can be trained on the job, it is advantageous for a job applicant to have training because of the specialized and complex nature of the equipment. Health care occupations are continually changing and growing, with new jobs emerging as advances in the field occur. As the occupations grow, there will be more job specialization and splitting, with new positions available.

The types of duties auxiliary health care personnel perform involve much personal contact with patients. English language skills to be stressed in a bilingual vocational training program include conversing with patients, making them comfortable, explaining procedures and treatment, scheduling appointments and keeping records. These same skills in languages other than English are also extremely important in the health care occupations because of the high degree of direct patient contact.

Technicians and technologists who pass written and/or practical examinations have better chances for advancement. Therefore, it is important to teach some basic test-taking skills and the types of questions or
problems to be encountered so that trainees will find it easier to prepare for the examination on their own.

The job outlook varies for the different jobs as well as in different parts of the country. For example, there is an oversupply of X-ray (radiologic) Technologists in the Northeastern part of the country, but a shortage in the South and Northwest. Physician Assistants are needed in medically underserved areas, such as rural areas and inner cities. There are excellent employment opportunities for Medical Assistants, Dental Assistants, and Medical Record Technicians. Therefore, it is important for each bilingual vocational training program administrator to continually be in contact with employers, State and private employment agencies and administrators of other training facilities to determine the local labor market conditions.

Health care occupations usually have a number of openings available because of the high turnover in the entry level positions (requirements are minimal, earnings are low). There is also a high demand for health care services resulting from a growing population, an increase in the number of older people (who usually need more medical services), and the ability of patients to pay for medical services because of insurance coverage.

Employment Projections

Health care occupations will be among the faster growing occupations during the 1980's. As shown in Table 5, the rate of increase in employment in these occupations is expected to be about twice as great as the rate of growth for all occupations combined.

The growth rate of the health care occupations in the professional and technical group is expected to be about 50 percent higher than for that group as a whole.
<table>
<thead>
<tr>
<th>Job Title</th>
<th>Education</th>
<th>Training/Experience</th>
<th>Language Skills Required</th>
<th>Language Skills Required</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TECHNOLOGISTS AND</strong></td>
<td></td>
<td></td>
<td>English</td>
<td>Other Language</td>
</tr>
<tr>
<td><strong>TECHNICIANS</strong></td>
<td></td>
<td></td>
<td>Oral</td>
<td>Oral</td>
</tr>
<tr>
<td>Technologist</td>
<td>High school or equivalent</td>
<td>1-2 yr. training program, including practical experience.</td>
<td>Supervising, training staff, evaluating staff performances, study research projects.</td>
<td>Supervising, training staff, telephone skills, scheduling tests for patients.</td>
</tr>
<tr>
<td>Technician</td>
<td>High school or equivalent</td>
<td>1-2 yr. training program helpful.</td>
<td>Taking medical history; giving report; telephone skills; caring for patients</td>
<td>Taking medical history; telephone skills; caring for patients</td>
</tr>
<tr>
<td>Assistant Technician</td>
<td>High school or equivalent</td>
<td>9-month training program helpful.</td>
<td>Work schedules; ordering supplies, equipment</td>
<td>Medical history; reports; forms.</td>
</tr>
<tr>
<td><strong>EMERGENCY MEDICAL</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SERVICES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EMT - Paramedic</td>
<td>High school or equivalent</td>
<td>Standard 100-hour course.</td>
<td>Taking medical history; giving report; telephone skills; caring for patients</td>
<td>None.</td>
</tr>
<tr>
<td>EMT - Intermediate</td>
<td>High school or equivalent</td>
<td>Standard 100-hour course.</td>
<td>Taking medical history; giving report; telephone skills; caring for patients</td>
<td>None.</td>
</tr>
</tbody>
</table>

Job titles are listed in order of advancement. Further details are provided in the job descriptions for each job title. Additional job titles are included in the career progression ladder to show advancement opportunities.
Table 8
Employment in Health Care Occupations
Actual 1978 and Projected 1990*

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1978</td>
<td>1990</td>
</tr>
<tr>
<td>ALL OCCUPATIONS COMBINED</td>
<td>97,610</td>
<td>L: 119,590</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M: 121,447</td>
</tr>
<tr>
<td></td>
<td></td>
<td>H: 127,907</td>
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<tr>
<td></td>
<td>+22.5</td>
<td>+24.4</td>
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<tr>
<td>PROFESSIONAL, TECHNICAL AND RELATED WORKERS</td>
<td>15,570</td>
<td>L: 20,038</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M: 20,295</td>
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<td>H: 21,119</td>
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<td></td>
<td>+28.7</td>
<td>+30.3</td>
</tr>
<tr>
<td>HEALTH TECHNOLOGIST AND TECHNICIANS</td>
<td>1,246</td>
<td>L: 1,811</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M: 1,820</td>
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<td></td>
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<td>H: 1,906</td>
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<td></td>
<td>+45.3</td>
<td>+46.0</td>
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<tr>
<td>Dental Assistants</td>
<td>123</td>
<td>L: 193</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M: 191</td>
</tr>
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<td>+57.5</td>
<td>+55.9</td>
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<tr>
<td>Dental Hygienists</td>
<td>53</td>
<td>L: 84</td>
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<tr>
<td></td>
<td></td>
<td>M: 84</td>
</tr>
<tr>
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<td></td>
<td>+57.9</td>
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<tr>
<td>Health (Medical) Records Technologists</td>
<td>30</td>
<td>L: 44</td>
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<td></td>
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<td>M: 44</td>
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<td>+47.1</td>
<td>+47.3</td>
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<tr>
<td>Medical Technicians</td>
<td>82</td>
<td>L: 119</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M: 119</td>
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<tr>
<td></td>
<td>+46.0</td>
<td>+46.4</td>
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<tr>
<td>Medical Lab Technologists</td>
<td>98</td>
<td>L: 141</td>
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<td></td>
<td>M: 141</td>
</tr>
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<tr>
<td></td>
<td>+43.9</td>
<td>+44.3</td>
</tr>
</tbody>
</table>

*Employment projections are based on data from the U.S. Bureau of Labor Statistics. For each industry, employment in 1978 is shown, and three series of employment projections are shown for 1990: Low (L), Medium (M) and High (H). For comparison, projections also are shown (in capital letters) for all occupations combined and for the major occupational groups of which the occupations studied are a part. The projections are explained and additional detail is provided in Appendix A.
<table>
<thead>
<tr>
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<tbody>
<tr>
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</tr>
<tr>
<td>Surgical Technicians</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>30</td>
<td>44</td>
<td>L: +48.1</td>
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<td></td>
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<tr>
<td>X-Ray Technicians</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>86</td>
<td>126</td>
<td>L: +47.4</td>
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<tr>
<td>OPERATIVES</td>
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<td>16,399</td>
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<tr>
<td>TRANSPORT EQUIPMENT OPERATIVES</td>
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HEALTH CARE OCCUPATIONS
LISTING OF CORPORATIONS/ORGANIZATIONS

DATA SOURCES

- Emergency Medical Service, San Francisco, CA
- Fairfax Hospital, VA
- Gouverneur Hospital, NY
- Montgomery County Fire and Rescue Services, MD
- Northern Virginia Mental Health Center, VA
- St. Mary's Hospital and Medical Center, CA

ADDITIONAL INFORMATION

- Overview of jobs in the health field: request a copy of "200 Ways to a Health Career" from:
  --National Health Council
  1740 Broadway
  New York, NY 10019

- Dental Assistant:
  --Career opportunities, scholarships, accredited dental assistant programs, certification requirements:
  -American Dental Assistants Association
    666 N. Lake Shore Drive
    Suite 1130
    Chicago, IL 60611
  -Commission on Dental Accreditation
    211 E. Chicago Avenue
    Chicago, IL 60611
  -Dental Assisting National Board, Inc.
    666 N. Lake Shore Drive
    Suite 1136
    Chicago, IL 60611

- Dental Hygienist:
  --Accredited programs, educational requirements:
  -Division of Professional Development
    American Dental Hygienists' Association
    444 N. Michigan Avenue
    Suite 3400
    Chicago, IL 60611
Licensing information:

-National Board of Dental Examiners
211 E. Chicago Avenue
Chicago, IL 60611

-State Board of Dental Examiners in each State.

Employment opportunities:

-Private dental offices
-Public health agencies
-School systems
-Industrial plants
-Clinics
-Hospitals
-Dental hygiene schools

Electrocardiograph (EKG) Technician:

Membership and credentialing program:

-American Cardiology Technologists Association
1 Bank Street
Suite 307
Gaithersburg, MD 20760

Employment opportunities:

-Hospitals--cardiology department
-Clinics
-Cardiologists' offices

Electroencephalographic (EEG) Technician and Technologist:

General career, information, list of accredited formal training programs:

-Executive Office
American Society of EEG Technologists
32500 Grand River Avenue
#103
Farmington, MI 48024

Registration with American Board of Registration of Electroencephalographic Technologists (ABRET):

-The Psychological Corporation
304 E. 45th Street
New York, NY 10017
Employment opportunities:
- Hospitals
- Neurologists' offices
- Neurosurgeons' offices

Emergency Medical Technician:

General information:
- National Association of Emergency Medical Technicians
  P.O. Box 334
  Newton Highlands, MA 02161

Training courses, registration, employment opportunities:
- Emergency Medical Services Division
  State Health Department

Registration:
- National Registry of Emergency Medical Technicians
  P.O. Box 29233
  Columbus, OH 43229

Employment opportunities:
- Fire Departments
- Hospitals
- Private Ambulance Services
- Police Departments

Medical Assistant:

Career opportunities, accredited educational programs, certification requirements (CMA):
- The American Association of Medical Assistants
  One East Wacher Drive
  Suite 2110
  Chicago, IL 60601

Career opportunities, RMA certification requirements:
- American Medical Technologists,
  Medical Assistant Program
  710 Higgins Road
  Park Ridge, Il 60068

List of approved educational programs:
- Accrediting Bureau of Health Education Schools
  Oak Manor Office
  29089 U.S. 20 West
  Elkhart, IN 46514
• Medical Records Technician:
  --List of approved schools, correspondence courses:
    - American Medical Record Association
      John Hancock Center
      Suite 1850
      875 N. Michigan Avenue
      Chicago, IL 60611

• Operating Room (Surgical) Technician:
  --Career information, training programs, certification:
    - Association of Surgical Technicians
      Caller Number E
      Littleton, CO 80120

• Optometric Assistant:
  --Career information, training programs, National Paraoptometric Registry:
    - American Optometric Association
      Paraoptometric Section
      243 N. Lindbergh Boulevard
      St. Louis, MO 63141

• Physician Assistant:
  --Individual training programs, certification requirements, brochure "The Physical Assistant Profession, What You Should Know":
    - Association of Physician Assistant Programs
      2341 Jefferson Davis Highway
      Suite 700
      Arlington, VA 22202
  --Description of national certifying examination, eligibility requirements:
    - National Commission on Certification of Physician Assistants, Inc.
      3384 Peachtree Road, N.E.
      Suite 560
      Atlanta, GA 30326
- X-Ray (Radiologic) Technologist:

--Career information:

- American Society of Radiologic Technologists
  55 E. Jackson Boulevard
  Chicago, IL 60604

- Department of Allied Health Education
  and Accreditation
  American Medical Association
  535 N. Dearborn Street
  Chicago, IL 60610

CORPORATION/AGENCY LISTING JOB OPPORTUNITIES

- White Memorial Medical Center
- Clinica De La Raza
- Good Samaritan Hospital
- Maxicare
- Orthopaedic Hospital
- Advanced Health System
- Clinica Sierra Vista
- Central City Community Mental Health Center
- Bayview
- Project Ahead Chinatown Health Clinic
- Children's Hospital National Medical Center
- Greater Washington Health Center
- Doctor's office

- Dental office

LOCATION

Los Angeles, CA
Los Angeles, CA
Los Angeles, CA
Los Angeles, CA
Los Angeles, CA
Los Angeles, CA
Los Angeles, CA
Los Angeles, CA
Los Angeles, CA
New York, NY
Washington, D.C.
Washington, D.C.
Los Angeles/
Hollywood, CA
Washington/
Los Angeles/
Santa Monica, CA
JOB TITLE: ORDERLY TRANSPORT ESCORT

DUTIES:

- Obtains patient escort assignments and schedule from a designated dispatcher-supervisor-Service Department and reports to Nurse-in-charge.

- Introduces self to patient, explains the nature of the trip, escorts the patient to and from the Nursing Service to a designated area until someone else assumes responsibility for the patient or is given another assignment by the Nursing supervisor and reports back to the dispatcher-Service Department.

- Transports patients by wheelchair, stretcher, bed, or stretcher-bed. Escorts ambulatory patients, including those with intravenous apparatus to and from various nursing units, X-ray, scheduled therapies, various clinics, other diagnostic and therapeutic units, transfers, discharges, religious and recreation centers within the hospital.

- Maintains control of patients' charts and releases same only to authorized hospital personnel.

- Maintains records of patient transport activities including the time a patient is picked up, time of patient's arrival at a specified area and time of patient's return to the Nursing Service.

- Places patients in and out of wheelchair, stretcher, bed, stretcher-bed and morgue tray and obtains assistance if necessary.

- Escorts newly admitted patients to designated areas in the hospital complex and assists them in storing their luggage, packages, clothing and other items.

- Transports bodies and/or assists mortuary caretaker in transporting same to the mortuary and places in refrigerator when necessary, searches, dead on arrivals (D.O.A.'s) and completes the required D.O.A.'s reports, transports fetus, amputated parts or other specimen to morgue; delivers specimens, charts, X-Rays, etc., to and from specified area (such as emergency room, wards, laboratories, etc.).

- Responsible for the ready availability, upkeep and cleanliness of wheelchairs, stretchers, stretcher-beds and morgue trays, sterilization of incoming patients' clothing and other items when required.

- May collect and deliver regular and emergency requisitions for X-ray, electrocardiograph, basal
metabolism, physiotherapy and other diagnostic tests and treatments, assists with transporting various equipment and supplies, and other messenger assignments.

LANGUAGE SKILLS:

ENGLISH: Oral skills: conversing with patient; explaining procedures to patient. Reading and writing skills: keeping simple clinical records.

OTHER LANGUAGE: Oral skills: conversing with patient; explaining procedures to patient.

TRAINING REQUIREMENTS:

PRIOR: Completion of Elementary school. High school preferred by some employers.

CONCURRENT: On-the-job training—several days to a few months. Union membership may be required in some areas.

TRAINING AVAILABILITY:

In-house: hospitals, nursing homes, clinics.

EARNINGS:

$7,000 to $11,155 per year, large urban area.

ADVANCEMENT OPPORTUNITIES:

Limited without further training. Some institutions provide in-service training programs. Advancement to operating room technician, licensed practical nurse with training.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: NURSE AIDE (HOSPITAL ATTENDANT, NURSING ASSISTANT)

DUTIES:

- Assists with physical care of selected patients. Performs assigned treatment and diagnostic procedures, such as changes of simple dressings, taking vital signs, giving enemas, etc. Records personal care given.

- Prepares patient for examination by performing assigned procedures such as temperature, pulse, respiration, height, weight, and measurements and assists in the examination process; records findings on patient chart.

- Observes patients' and/or families' condition, mental state and social behavior and reports observations.

- Participates in nursing and interdisciplinary health team conferences to assess patients' and families' needs, and to plan nursing care.

- Assists in recreational, remotivational and resocialization activities of nursing care programs.

- Sets up and arranges examining room. Cleans, sterilizes and sets up instruments, trays and other equipment.

- Assists in clinic, in admission procedures and in regulation of visitors. Cares for patients' clothing and property on the ward.

- Prepares patient for meals and helps feed them as necessary.

- Answers patient's bell calls, delivers messages.

- Changes linen and makes beds. Keeps wards, utility and treatment rooms in a neat and orderly condition.

- Provides postmortem care.

- May perform auxiliary services in laboratories, pharmacies and other specialized areas.

LANGUAGE SKILLS:

ENGLISH: Oral skills: helping patients; answering bell calls; assisting visitors; preparing patients for examinations. Reading and writing skills: writing on patient's chart.

OTHER LANGUAGE: Oral skills: helping patients; answering bell calls; assisting visitors; preparing patients for examinations.
TRAINING REQUIREMENTS:

PRIOR: Completion of elementary school. Some employers prefer high school graduation, or successful completion of a basic skill training program for Nurse Aide, or its equivalent is desirable.

CONCURRENT: On-the-job training, several days to a few months, plus classroom instruction. Attend continuing education courses to maintain clinical competence. Union membership may be required in some locales.

TRAINING AVAILABILITY:

Courses in home nursing, first aid offered by many public school systems, community agencies.

EARNINGS:

$8,825 to $10,750 per year, large urban area.

ADVANCEMENT OPPORTUNITIES:

Limited without further training. Some institutions provide in-service training programs. Advancement to hospital operating room technician, licensed practical nurse with additional training.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: MEDICAL ASSISTANT

DUTIES:

• Helps physician examine and treat patients.
• Performs most of the administrative tasks needed to run an office.
• Prepares treatment rooms for examination of patient.
• Drapes patients with covering and positions instruments and equipment.
• Hands instruments and materials to physician as directed.
• Sterilizes and cleans instruments.
• Prepares inventory of supplies to determine items to be replenished.
• Interviews patients, checks pulse, temperature, blood pressure, weight, and height.
• May operate equipment, give injections or treatments, assist in laboratory, apply dressings.
• May instruct patients about medication and self-treatment.
• Schedules appointments, greets patients, answers telephone, receives money for bills, keeps X-ray and other medical records, performs secretarial tasks, completes insurance forms, maintains financial records.

LANGUAGE SKILLS:

ENGLISH: Oral skills: conversational skills; telephone skills; taking medical history; making patient comfortable; following physician's instructions. Reading and writing skills: notes on patient's chart; writing down medical history; keeping patient's records, supply inventory; writing medical letters.

OTHER LANGUAGE: Oral skills: conversational skills, telephone skills, taking medical history, making patient comfortable.

TRAINING REQUIREMENTS:

PRIOR: High school or equivalent usually needed for program entry or on-the-job training. Courses in math, health, biology, typing, bookkeeping, office practices
are helpful. Completion of a one- or two-year training program.

CONCURRENT: On-the-job training. Can take exams to be certified or registered by the American Association of Medical Assistants (AAMA) or American Medical Technologists, respectively.

TRAINING AVAILABILITY:

Public or private vocational schools, community or junior colleges. Two agencies, the Committee on Allied Health Education and Accreditation (CAHEA) and the Accrediting Bureau for Health Education Schools (ABHES) are recognized to accredit programs in medical assisting.

EARNINGS:

$6,500 to $7,800 per year for inexperienced medical assistants. Vary by assistant's experience, physician's practice, volume, and geographic location.

ADVANCEMENT OPPORTUNITIES:

Limited. Competent assistants with leadership abilities to office manager. Advancement to other health occupations requires additional formal training.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: DENTAL ASSISTANT

DUTIES:

- Makes patient comfortable in dental chair.
- Prepares patient for treatment.
- Obtains patient's dental records.
- Assists dentist by handing him/her the proper instruments and materials.
- Keeps patient's mouth clear by using suction or other devices.
- Prepares materials for making impressions and restorations.
- Exposes radiographs, processes dental X-ray film.
- Provides oral health instruction and prepares instruments for sterilization.
- Makes casts of the teeth and mouth.
- May manage the office and arrange and confirm appointments, receive patients, keep treatment records, send bills, receive payments and order dental supplies and materials.

LANGUAGE SKILLS:

ENGLISH: Oral skills: following directions; giving oral instructions to patients; telephone conversational skills; educating patients. Reading and writing skills: writing accurate records; completing insurance forms.

OTHER LANGUAGE: Oral skills: giving oral instructions to patients; telephone conversational skills; educating patients.

TRAINING REQUIREMENTS:

PRIOR: High school required.

CONCURRENT: On-the-job training program. Correspondence course.

TRAINING AVAILABILITY:

Post-high school programs given in junior and community colleges or in vocational and technical schools. The Armed Forces also provides training.
EARNINGS:

1980: Private Practice average earnings:
starting: $9,000 to $11,000 per year.

1981: Federal Government:
beginning: $9,800 per year.
experienced: $11,800 per year.

ADVANCEMENT OPPORTUNITIES:

After some experience advance to dental hygienists, sales representatives of manufacturers of dental products. This field provides opportunity in teaching and program administration also.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: OPTOMETRIC ASSISTANT (PARAOPTOMETRIC)

DUTIES:

- Performs a combination of clerical and patient care tasks.
  - Keeps patients' records, schedules appointments, handles bookkeeping, correspondence, filing.
  - Prepares patients for eye examinations, takes initial case histories, records results of optometrist's examinations.
  - Measures patients for correct and comfortable fit of glasses.
  - Suggests size and shape of eyeglass frames to complement patient's facial features.
  - Adjusts finished eyeglasses by heating, shaping, and bending the plastic or metal frames.
  - Teaches patient how to wear and care for contact lenses.
  - Helps patients with vision therapy activities to develop eye coordination, focusing, other visual abilities.
  - Adjusts glasses to assure proper fit, insert lenses in frames, repair frames.
  - Keeps an inventory of optometric materials, orders supplies, cleans and cares for the instruments.

- In a large practice or clinic, assistants may specialize in laboratory work, contact lenses, visual training, office administration.

LANGUAGE SKILLS:

ENGLISH: Oral skills: conversing with patients; taking case history; teaching patient about contact lenses, vision therapy. Reading and writing: keeping inventory; office administration tasks.

OTHER LANGUAGE: Oral skills: conversing with patients; taking case history; teaching patient about contact lenses, vision therapy.
TRAINING REQUIREMENTS:

PRIOR: High school or equivalent preferred. Work experience in an office or health occupation. Courses in English, math, office procedures helpful. Completion of a one- or two-year training program.

CONCURRENT: On-the-job training may be substituted for formal training. With training and experience, can take an exam to be registered by the National Paraoptometric Registry (Registered Optometric Assistant -- Opt. A.R.).

TRAINING AVAILABILITY:


EARNINGS:

1980:

beginning: $6,000 to $8,000 per year.

Vary by geographic region, academic and technical qualifications, size and type of practice of employer.

ADVANCEMENT OPPORTUNITIES:

With more extensive training, to optometric technician.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: MENTAL HEALTH ASSISTANT

DUTIES:

- Observes and reports on patient's general state of health, nutrition, normal body functions, and health habits.
- Performs simple nursing procedures in relating to patients' supportive and therapeutic needs, as necessary.
- Observes patients for signs of increasing anxiety, intervenes whenever appropriate to relieve patients' acute distress. Reports behavior of patients to inter-disciplinary team to assist in formulating diagnosis, treatment and after-care plans.
- Participates as co-leader or participant observer in group or family counseling or therapy sessions.
- Counsels individuals or groups in basic living skills such as health, homemaking, housing, etc. in order to assist them to deal more effectively with daily problems.
- Participates in organizing and conducting group therapeutic activities for patients both on the ward and/or in the community.
- Instructs and guides non-professional staff personnel in developing and selecting suitable activity for various types of patients.
- Interviews patients and families to obtain information to define and clarify the presenting problems. Assists patient and/or family in management of social and economic conditions which may have relevance to treatment goals.
- Visits home of psychiatric patients to assist in evaluation of home and social situation and to develop family awareness of plans for patient and their role in patient's care.
- Participates with the treatment team in providing aftercare services for patients.
- Participates in and conducts meetings in the community to explain hospital programs and procedures and to identify community concerns related to the hospital.
- Conducts orientation meetings for newly assigned staff regarding mental health services and patient care.
- Maintains records and reports of patients and other contacts.

**LANGUAGE SKILLS:**

**ENGLISH:** Oral skills: participating in counseling and therapy sessions; reporting patients' conditions; interviewing patients and families; instructing, guiding staff; providing aftercare services; conducting community meetings. Reading and writing skills: record keeping; report preparation.

**OTHER LANGUAGE:** Oral skills: participation in counseling and therapy sessions; interviewing patients and families; instructing, guiding staff; providing aftercare services; conducting community meetings.

**TRAINING REQUIREMENTS:**

**PRIOR:** Associate of Arts Degree in Mental Health, or minimum of one (1) year of related work experience, as defined, in a psychiatric setting plus 30 college credits, at least one-half of which must be in Behavioral Sciences.

**CONCURRENT:** Union membership may be required in some locales.

**TRAINING AVAILABILITY:**

Junior and community colleges; colleges and universities.

**EARNINGS:**

$12,934 to $14,759 per year, large urban area.

**ADVANCEMENT OPPORTUNITIES:**

None available for this position yet. Lateral transfers to other departments in the health care facility.

**INTERNATIONAL OPPORTUNITIES:**

Not applicable.
JOB TITLE: MEDICAL RECORD CLERK

DUTIES:

- Compiles, verifies, and files medical records of hospital or clinic patients.
- Compiles statistics for use in reports and surveys.
- Prepares folders, maintains records of newly admitted patients.
- Reviews contents of patients' medical record folders, assembles into standard order, files according to established procedure.
- Reviews inpatient and emergency room records to insure presence of required reports and physicians' signatures; routes incomplete records to appropriate personnel for completion or prepares reports of incomplete records to notify administration.
- Checks list of discharged patients to insure receipt of all current records.
- Compiles daily and periodic statistical data, such as admissions, discharges, deaths, births, types of treatment.
- Records diagnosis and treatments, including operations performed, for use in completing hospital insurance billing forms.
- May type and process birth certificates.
- May assist with coding of records, such as sex, age, referral source.
- Answers routine requests.

LANGUAGE SKILLS:

ENGLISH: Oral skills: responding to routine requests, following instructions, obtaining information from patients for birth certificates, other records. Reading and writing skills: compiling, verifying, filing records, reviewing records.

OTHER LANGUAGE: Oral skills: responding to routine requests, obtaining information from patients.
TRAINING REQUIREMENTS:

PRIOR: High school or equivalent. Basic secretarial skills. Courses in science, health, typing, math helpful.

CONCURRENT: On-the-job training—about one month. A correspondence course in medical transcription as home study or in-service training helpful.

TRAINING AVAILABILITY:

Place of employment—hospital, health care facility, nursing home, clinic, health maintenance organizations.

EARNINGS:

1981: Federal Hospitals: $9,800 per year.

ADVANCEMENT OPPORTUNITIES:

To medical record technician with several years experience, completion of the American Medical Record Association (AMRA) Independent Study Program, 30 credit hours in medical record technology, and successful completion of the Accredited Record Technician (ART) examination.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: DENTAL HYGIENIST

DUTIES:

- Under supervision, performs auxiliary dental work of more than ordinary difficulty and responsibility.
- Examines charts and cleans teeth.
- Takes and develops dental radiographs.
- Takes and records dental history.
- Administers sodium fluoride treatments.
- Gives instruction in oral hygiene and conducts educational programs.
- May make impressions of teeth for study models.
- Requisitions supplies, keeps records and performs related work as required.

LANGUAGE SKILLS:

ENGLISH: Oral skills: following dentist's instructions, instructing patients, ordering supplies. Reading and writing skills: record keeping, filling out dental history form.

OTHER LANGUAGE: Oral skills: explaining home care procedures to patients, taking the medical/dental history.

TRAINING REQUIREMENTS:

PRIOR: High school. Completion of an accredited 2-year program, passing a written and clinical exam.

CONCURRENT: State Dental Hygienists License.

TRAINING AVAILABILITY:

In 1980, 210 schools of dental hygiene were accredited by the Commission on Dental Accreditation.
EARNINGS:

1980:

Private Office: $14,000 to $17,000 per year.

Federal Government: $11,000 to $13,000 per year.

Public Health: $14,000 per year.

ADVANCEMENT OPPORTUNITIES:

With additional education (a bachelor’s degree), can do research, teach, work in public or school health programs. With a master’s degree, can work as teacher or administrator in dental hygiene and dental assisting training programs, public health agencies, and research.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: ORTHOPTIST

DUTIES:

- Reviews patient's referral slip from physician to obtain medical data pertinent to patient's case.
- Prepares visual screening chart and schedules appropriate orthoptic tests.
- Positions, instructs and directs patient during testing and treatment phases.
- Administers orthoptic tests to measure such items as visual acuity, near point of convergence, extra-ocular muscles, focusing ability, binocular cooperation, eye fixation and deviation, and retinal correspondence.
- Uses such machines and work-aids in testing and therapy as visuscopes, projectorscopes, amblyscopes, prism bars, Maddox rods, Worth 4 Dot test, patch or occluder tests, and striated lenses.
- Evaluates testing data and results.
- Confers with ophthalmologist for instructions on testing procedures and in planning a therapy program for correction of ocular muscle imbalances.
- Schedules patients for periodic return visits to clinic and demonstrates specific ocular muscle exercises to be performed under ophthalmologist's instruction and guidance.
- Instructs adult patients and parents of young patients in utilization of corrective exercises at home.
- Follows up patients at periodic intervals on progress of correction of defects.
- Prepares reports and confers with ophthalmologist periodically on status of patients' progress.

LANGUAGE SKILLS:

ENGLISH: Oral skills: instructing, directing patients; explaining procedures; conferring with ophthalmologist (knowledge of medical terminology); telephone skills (making appointments). Reading and writing skills: report preparation; record keeping; reviewing patient's referral slip.
OTHER LANGUAGE: Oral skills: instructing, directing patients; explaining procedures; telephone skills (making appointments).

TRAINING REQUIREMENTS:

PRIOR: High school preferred; or two (2) years completed college studies, or 60 credits or the equivalent, and completion of a prescribed two (2) year course of training in Orthoptics in a training center approved by the American Orthoptic Council as a recognized training facility; and six (6) months experience as an Orthoptist; and certification by the American Orthoptic Council, or, satisfactory equivalent combination of education, experience and training.

CONCURRENT: On-the-job training.

TRAINING AVAILABILITY:

Private and public vocational/technical education programs, community colleges.

EARNINGS:

$14,580 to $20,250 per year, large area.

ADVANCEMENT OPPORTUNITIES:

None.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: OPERATING ROOM (SURGICAL) TECHNICIAN

DUTIES:

- Assists surgeons and anesthesiologists before, during, and after surgery, under direct supervision of registered nurses or surgical technologist supervisors.
- Helps set up operating room with the necessary instruments, equipment, sterile linen, and fluids.
- May prepare patients for the operating room, help drape and position them on the operating table.
- Passes instruments, sterile supplies to surgeons and their assistants.
- Holds retractors, cuts sutures, helps count sponges, needles, and instruments used during the operation.
- Helps prepare, care for, and dispose of specimens taken for testing; helps apply dressings.
- May operate sterilizers, lights, suction machines, and diagnostic equipment.
- Helps transfer patients to the recovery room.
- Assists nurses in cleaning and stocking the operating room for the next operation.

LANGUAGE SKILLS:

ENGLISH: Oral skills: conversing with patient; putting patient at ease; explaining procedure; understanding and following instructions from other health care team members. Basic reading and writing skills: identifying, labelling specimens.

OTHER LANGUAGE: Oral skills: conversing with patients; putting patient at ease; explaining procedure to patients; following instructions.

TRAINING REQUIREMENTS:

PRIOR: High school or equivalent normally required for training program entrance; completion of a 9-month to 2-year training program.

CONCURRENT: On-the-job training programs--6 weeks to 1 year in length, including classroom and clinical instruction (high school or equivalent required for this type of training).
TRAINING AVAILABILITY:

Vocational and technical schools, hospitals, community and junior colleges. In 1980, 87 training programs were accredited by the Committee on Allied Health Education and Accreditation (CAHEA). Armed Forces also offers training.

EARNINGS:

1981 survey:

Private Sector: average earnings:

starting: $1,200 per year.

experienced: $14,200 per year.

Federal Government: average earnings:

Operating Room Assistant:

starting: $8,951-$16,826 per year.

Surgical technicians who pass a comprehensive written examination are awarded a certificate by the Association of Surgical Technologists (Certified Surgical Technologist (CST)). May be paid a higher salary with this designation. Graduates of formal training programs earn more than those without this training.

Earnings vary by geographic location--higher on East and West Coasts; and by type of employer--technicians working for a surgeon earn more than those working in health care institutions.

ADVANCEMENT OPPORTUNITIES:

To assistant operating room administrator and assistant operating room supervisor. Administrator deals with the administrative aspects of running the operating room, including ordering supplies, arranging work schedules. Supervisor directs the other technicians in the operating room.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: MEDICAL RECORD TECHNICIAN

DUTIES:

- Develops and maintains a medical information system for a hospital or health facility, in conjunction with medical record administrator.
- Reviews medical records for consistencies, accuracy and completeness.
- Codes diseases, operations, diagnoses, and treatment according to recognized classification systems.
- Compiles medical care and census data for statistical reports.
- Transcribes medical reports.
- Maintains indexes on patient, disease, operations, and other categories.
- Analyzes records, cross-indexes medical information.
- Directs routine operation of medical record department.
- Maintains flow of medical records and reports to departments.
- May assist medical staff in special studies or research.
- Responds to inquiries from law firms, insurance companies, government agencies—gathers statistics, prepares periodic reports on types of diseases treated, surgery, use of hospital beds.
- May take records to court.

LANGUAGE SKILLS:

ENGLISH: Oral skills: supervising and instructing medical record clerks, answering inquiries, court presentations. Reading and writing skills: transcribing medical reports, reviewing medical records, gathering information, analyzing records.

OTHER LANGUAGE: Oral skills: supervising and instructing medical record clerks, answering inquiries.

TRAINING REQUIREMENTS:

PRIOR: Completion of a two-year associate degree program accredited by the Committee on Allied Health Education and Accreditation (CAHEA) of the American Medical Record
Association (AMRA). Successful completion of the Accredited Record Technician (ART) Examination.

CONCURRENT: On-the-job training—specific policies of organization or facility.

TRAINING AVAILABILITY:

Community and junior colleges.

EARNINGS:

1980: average earnings:

beginning technicians: $12,500 per year.
experienced technicians: $15,000 per year.

Federal Hospitals: average earnings:

all technicians: $12,500 per year.
experienced technicians: $11,000 to $19,000 per year.

ADVANCEMENT OPPORTUNITIES:

Higher supervisory positions with experience.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: AMBULATORY CARE TECHNICIAN

DUTIES:

- Performs technical and/or para-professional activities and procedures involving direct relationships with patients and families as a member of a treatment, nursing, medical-health care team in implementing appropriate regimens.

- Provides a means to bring people needing comprehensive care into the hospital care system.

- Serves as an extension of the health care team into the home and community.

- Participates in outreach programs to contact patients and families with health and/or social problems and refers them to family health care center.

- Assists in planning and implementing health education programs for the community served by the center.

- Serves as a liaison or patient advocate between health center and community resources. Accompanies patient to agencies, as needed, to offer therapeutic support and informational support.

- Participates in orientation and guidance of nurse aides newly assigned to center.

- Participates with other staff members of health team in planning post-hospital care for patients being discharged from the patient service.

- Meets with patient and family members to discuss policies, programs and resources available for their medical, nursing and health care needs.

- Participates with health care team in development of patient/family health care plan.

- Visits the patient and/or family at home to evaluate his/her ability to carry out the prescribed health regimen. Provides reinforcement and support to patient and family to follow medical directions.

- Provides direct nursing care in the home such as bathing, change of simple dressing, simple treatments, taking of vital measurements, and activities of daily living and other functions and activities of the basic Nurse Aide in support of the planned regimen.

- Teaches patient and/or family good health practices such as diet, accident prevention, importance of health supervision.
- Identifies critical home conditions and acute housing problems and refers to appropriate agencies.

- Observes family interaction and emotional home climate. Provides guidance and support during critical phases and stressful situations.

- Checks patient's charts to determine that physician's orders are understood and appropriate appointments are scheduled and confirmed.

LANGUAGE SKILLS:

ENGLISH: Oral skills: conversing with patients while providing direct nursing care; discussing post-hospital care with patients and families; training, guiding nurse aides; educating community groups; interviewing, telephone skills. Reading and writing skills: checking patients' charts; planning health education programs.

OTHER LANGUAGE: Oral skills: conversing with patients while providing direct nursing care; discussing post-hospital care with patients and families; educating community groups; interviewing, telephone skills.

TRAINING REQUIREMENTS:

PRIOR: One (1) year of satisfactory experience as related to major duties as described above for ambulatory care regimens in a health care, medical facility, or related organization or service.

One (1) year of satisfactory experience in providing non-professional nursing or medical support services in a hospital, health care or medical facility, or related organization or service and satisfactory completion of a prescribed course in an approved training program in the field of ambulatory health care.

Good knowledge of policies and practices utilized in performing non-professional nursing work in a hospital health care facility or similar organization or service.

CONCURRENT: On-the-job training. Union membership may be required in some cities.

TRAINING AVAILABILITY:

In-house: health-care facilities.
EARNINGS:

$12,486 to $14,739 per year, large urban area.

ADVANCEMENT OPPORTUNITIES:

Lateral transfers to health care positions.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: PHYSICIAN ASSISTANT (PA) (MEDEX, PHYSICIAN ASSOCIATE, COMMUNITY HEALTH MEDIC)

DUTIES:

- Provides patient services under supervision of physician.
- Obtains detailed medical histories from patients.
- Performs complete physical examinations.
- Reaches tentative diagnosis, prescribes appropriate treatments.
- Orders appropriate laboratory tests.
- Counsels patient and family on health and disease.
- Sutures minor wounds, assists in surgery, applies and removes cast and traction apparatus.

LANGUAGE SKILLS:

ENGLISH: Oral skills: taking medical histories; performing physical examination; counseling patient/family. Reading and writing skills: medical history; diagnosis; treatment prescribed.

OTHER LANGUAGE: Oral skills: obtaining medical history; understanding current problem; counseling patients and their families.

TRAINING REQUIREMENTS:

PRIOR: High school or equivalent is the minimum requirement for program entrance. Usually a 2-year training program (9-12 months--classroom, about 12 months--clinical rotations)

MEDEX training program: designed especially for individuals with previous, extensive patient care experience. Shorter period of classroom instruction, greater emphasis on clinical experience. Total program: approximately 18 months.

CONCURRENT: Certification requirements vary by State; usually by the National Commission on Certification of Physician Assistants, Inc. (NCCPA). Registration with the State Medical board or similar agency required in most States. Certification examination: 1-day written test plus a practical component.
TRAINING AVAILABILITY:

In 1980, 64 educational programs were approved by the Committee on Allied Health Education and Accreditation of the American Medical Association. Located in medical schools, community colleges, colleges and universities.

EARNINGS:

1981 survey: average starting salary:

hospitals, medical centers: $18,000 per year.

Those in health maintenance organizations (HMO's), hospitals, and physicians' offices earn more than those in clinics.

ADVANCEMENT OPPORTUNITIES:

Formal lines of advancement (e.g., to head PA) not yet established due to the recent emergence of this occupation. Advancement includes added responsibilities, higher earnings.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: EMERGENCY MEDICAL TECHNICIAN, PARAMEDIC

DUTIES:

- Responds to calls for emergency ambulance service.

- Observes and records the condition of the patient and/or circumstances which may have contributed to the patient's condition. Obtains, where possible, samples of such items as suspected poisons, drugs, foods or liquids from scene of incident.

- Administers emergency medical care at the scene and enroute, as appropriate, including the administration of oxygen and resuscitative measures, controlling bleeding, applying dressings and bandages, immobilizing fractures and suspected fractures and utilizing other measures as appropriate to stabilize patient's condition.

- Paramedics may administer drugs, orally and intravenously, under the supervision of a physician, through radio communication.

- Completes emergency births and prepares mother and infant for transportation.

- Lifts and carries patients, with assistance as necessary, by stretcher, chair or other device.

- Delivers patient to appropriate hospital for release to staff personnel at emergency room, providing data as to identification and condition of the patient to emergency room staff.

- Inspects assigned ambulance at the beginning and end of the tour of duty and assures that the ambulance is properly and adequately equipped and supplied; assures that ambulance and its equipment are operative.

- Maintains and cleans vehicle and equipment.

- Reports any mechanical and/or electrical problems with ambulance and/or equipment.

- Checks and maintains ambulance supplies.

- At E.M.S. Communications Center:

  - Operates computerized voice/digital communications dispatching console.

  - Dispatches calls for emergency ambulance service via UHF two-way radio, voice alarm or telephone.

  - Controls ambulance status CRT data display by typing coded messages on a keyboard data entry device.
- Monitors various communications systems for malfunctions.

- Receives and processes incoming telephone calls from the public for emergency ambulance service, obtaining all appropriate information from caller such as patient's address, condition, symptoms, etc.

- Fills out and timestamps an Incident Report Form (IRF) and routes IRF to appropriate radio dispatcher.

- Reports all accidents or unusual incidents to supervisor.

- Makes oral and written reports as required.

**LANGUAGE SKILLS:**

**ENGLISH:** Oral skills: report giving, telephone skills, taking a simple medical history. Able to deal effectively in a crisis situation. Reading and writing skills: report writing, filling out forms.

**OTHER LANGUAGE:** Oral skills: telephone skills, taking medical history, determining patient's condition.

**TRAINING REQUIREMENTS:**

**PRIOR:** High school or equivalent; completion of a standard course--100-hour program (may be longer in some States). May take a 2-day course dealing with the removal of trapped victims and a 5-day course on driving emergency vehicles. Three- to five-month training for paramedics. Armed Forces' training as a "medic" is good preparation. Successful completion of a written and practical examination administered by the National Registry of Emergency Medical Technicians leads to the title of Registered EMT-Ambulance. Makes higher paying jobs easier to obtain. Some States offer their own certification examination—all States require certification.

**CONCURRENT:** Registration required every 2 years. Possession of a valid permanent driver's license.

**TRAINING AVAILABILITY:**

Police, fire, and health departments, hospitals; special courses in medical schools, colleges and universities in all States.

**EARNINGS:**

Depend on the type of employer, training and experience, geographic location.
1981:
Starting: EMT-Ambulance: $7,000 to $11,000 per year.
Experienced: up to $13,000 per year.

1981:
Starting: EMT-Paramedic: $10,000 per year.
Federal Government: $11,000 to $17,000 per year.

In California, bilingual EMTs receive a $12 biweekly stipend.

ADVANCEMENT OPPORTUNITIES:

To EMT-Intermediate: registration involves passing an examination on the basic EMT skills and the first part of the EMT-Paramedic skills. Prerequisite: EMT-Ambulance registration or certification.

To EMT-Paramedic: registration requires: EMT-Ambulance registration, successful completion of an EMT-Paramedic training program, 6 months of field experience as an EMT-Paramedic, and passing a written and practical examination.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: ELECTROENCEPHALOGRAPHIC (EEG) TECHNICIAN

DUTIES:

- Takes a simplified medical history, helps patient relax for the test.
- Operates electroencephalograph equipment to measure impulse frequency and differences in electrical potential between various areas of the brain to obtain data for use on diagnosis of brain disorders.
- Prepares and positions patients for electroencephalograph tests.
- Attaches electrodes of electroencephalograph to specific positions on patient's head.
- Turns on machine and rotates switches to obtain tracing of impulses from various parts of the brain. Eliminates tracing caused by outside interference.
- Identifies tracing and prepares records.
- Advises supervisor of any mechanical problems.
- Makes minor adjustments and repairs.
- Recognizes neurologic, cardiac, and respiratory changes.

LANGUAGE SKILLS:

ENGLISH: Oral skills: conversing with patients, explaining procedure. Reading and writing skills: record keeping.

OTHER LANGUAGE: Oral skills: conversing with patients, explaining procedures.

TRAINING REQUIREMENTS:

PRIOR: High school or equivalent normally needed for entrance into training program or completion of a 1- to 2-year training program or satisfactory equivalent.

CONCURRENT: On-the-job training by experienced EEG personnel.

TRAINING AVAILABILITY:

In 1980, there were 53 formal training programs, 19 of which were approved by The American Medical Association's Committee on Allied Health Education and Accreditation.
Programs available in colleges and universities, junior colleges, medical centers, hospitals, and vocational or technical schools.

EARNINGS:

1981 survey: average earnings:

starting: $11,600 per year.

ADVANCEMENT OPPORTUNITIES:

To EEG technologist with additional training.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: ELECTROCARDIOGRAPH (EKG) TECHNICIAN

DUTIES:

- Operates electrocardiograph equipment to record electrical wave tracing of electrical currents emanating from the heart muscle for use in the diagnosis of heart ailments.
- Prepares and positions patient for electrocardiograph test, explaining procedure.
- Attaches electrodes to specific areas of patient's body, as required.
- Manipulates switches and moves chest electrodes to successive positions across the chest to record heart action in graph form on a roll of paper.
- Identifies section of tracings by pressing a marker button to signify electrode positions.
- May conduct other tests, such as vectorcardiograms, stress testing, pulse recordings, and Holter monitoring and scanning.
- Identifies section of tracings by pressing a marker button to signify electrode positions.
- Notes irregularities in recording process and reports malfunctioning of equipment to avoid serious damage.
- May schedule appointments, type doctors' diagnoses.
- Maintains records and files of tracings.
- Maintains equipment.

LANGUAGE SKILLS:

ENGLISH: Oral skills: communicating with supervisor and patients, explaining procedures, following detailed instructions, telephone skills (making appointments). Reading and writing skills: record keeping.

OTHER LANGUAGE: Oral skills: conversing with patients, telephone skills, explaining procedures.

TRAINING REQUIREMENTS:

PRIOR: High school or equivalent preferred.

CONCURRENT: On-the-job training conducted by a supervisor or cardiologist, 1 month to 1 year. Union membership in some locales may be required.
TRAINING AVAILABILITY:

Place of employment. Vocational and technical schools, junior and community colleges provide 6-week courses in the basic EKG test. One- to two-year programs provide more extensive training.

EARNINGS:

1981 survey:
starting salary: $10,200 per year.
experienced: $17,000 per year.

Federal Government: (called "Medical Machine Technicians"):
starting salary: $11,000 to $17,000 per year

(EKG technicians with formal training earn higher starting salaries than those with on-the-job training only.)

ADVANCEMENT OPPORTUNITIES:

With additional training and experience, can advance to monitor technicians, Holter monitoring technicians, stress testing technicians, echocardiogram technicians, cardiac catheterization technicians, cardiovascular technicians, cardiopulmonary technicians, and cardiology technologists. Also, to supervisory positions.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: ASSISTANT BIO-MEDICAL EQUIPMENT TECHNICIAN

DUTIES:

- Operates and monitors bio-medical equipment in one or more of the following areas:
  - heart-lung machine used to pump and oxygenate blood during open heart surgery or in treatment of patients with acute myocardial infarction, pulmonary embolism or acute low cardiac syndromes;
  - electro-diagnostic equipment;
  - hyperbaric oxygen chamber, including assistance to physician and/or nurses in medical or surgical procedures;
  - analysis of blood gas; and,
  - artificial kidney machine; manufacturing arteriovenous cannulae components, making sterilizing solutions and detector for same; maintaining steam and ethylene oxide autoclaves;

- Assists physician in cardiac catheterization procedures, including monitoring and operating various recorder machines; performs air and gas analysis.

- Assists in the performance of pulmonary examinations and evaluations.

- Prepares and positions patients for diagnostic examination or treatment.

- Calibrates or standardizes equipment as necessary.

- Performs routine testing, maintenance, adjustment and minor repair of equipment.

- Recognizes patient's lack of response or adverse reaction to treatment or examination procedures and reports problem to physician and nurse in charge.

- Prepares records and reports.

- Orders equipment and supplies as needed.

- Assists in supervision of bio-medical equipment trainees.
LANGUAGE SKILLS:

ENGLISH: Oral skills: reporting problems to nurse or doctor in charge; supervising trainees; preparing patients for treatment. Reading and writing skills: record keeping; report preparation; ordering equipment and supplies.

OTHER LANGUAGE: Oral skills: preparing patients for treatment; supervising trainees.

TRAINING REQUIREMENTS:

Prior: Satisfactory completion of one-year's service as Bio-Medical Technician Trainee; or Associate degree which included a course in the appropriate medical technician field at the second level; or one academic year of study in an accredited junior college, college or university which included six semester hours in the health or medical field and/or chemistry or biological sciences, plus a 9-month approved training course in appropriate medical machine technician field; or successful completion of an approved program in operating room or surgical technician, plus two years experience in appropriate medical technician field; or a satisfactory equivalent combination of education and experience.

CONCURRENT: Union membership may be required in some locales.

TRAINING AVAILABILITY:

Junior and community colleges, colleges and universities, vocational or technical programs offer accredited programs.

EARNINGS:

$12,934 to $14,756 per year, large urban area.

ADVANCEMENT OPPORTUNITIES:

After one year of satisfactory service, to Bio-Medical Equipment Technician. Lateral transfers to other technician positions.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: BIO-MEDICAL EQUIPMENT TECHNICIAN

DUTIES:

- Performs some of the more difficult and specialized examinations or treatments in one or more of the following areas: heart-lung machine, hemo-dialysis, cardiac catheterization, pulmonary function, electro-diagnostic machines, analysis of blood gas, ultrasound, hyperbaric chamber.

- Consults with medical staff to determine, evaluate and accommodate patients' needs.

- Participates in demonstration of methods and techniques to technical staff, students or professional personnel.

- Assembles, inspects and maintains equipment in efficient operating condition, cleans and sterilizes equipment, makes minor adjustments and repairs. Prepares requisitions for major repairs and replacements.

- Participates in studies and research projects.

- Serves as member of a team of physicians, nurses, etc. in some of the more difficult and specialized examinations and procedures.

- Administers, if assigned to, one or more medical machine units and the management of the equipment and supplies utilized in its operation.

- Schedules tests for patients.

- Supervises and trains technical and auxiliary staff assigned to units, prepares work schedules, evaluates performance.

LANGUAGE SKILLS:

ENGLISH: Oral skills: consulting with medical staff (knowledge of medical terminology); demonstrating, explaining methods, procedures to staff or trainees; scheduling appointments; telephone skills; supervising, training staff. Reading and writing skills: preparing work schedules; participating in research projects.

OTHER LANGUAGE: Oral skills: demonstrating, explaining methods, procedures to staff or trainees; scheduling appointments; telephone skills; supervising, training staff.
TRAINING REQUIREMENTS:

PRIOR: One year of satisfactory service as Assistant Bio-Medical Equipment Technician. Associate degree, which included course in bio-medical technician field; and two years experience in the appropriate bio-medical technician field in an approved hospital or health facility; or High school or equivalent, and three years experience in the appropriate bio-medical technician field in an approved hospital or health facility; or a satisfactory equivalent combination of education and experience.

CONCURRENT: Union membership may be required in some locales.

TRAINING AVAILABILITY:

Junior and community colleges, colleges and universities, vocational and technical schools offer accredited programs.

EARNINGS:

$14,896 to $16,967 per year, large urban area.

ADVANCEMENT OPPORTUNITIES:

After 2 years of satisfactory performance, to Senior Bio-Medical Equipment Technician. Lateral transfers to other technician positions.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: SENIOR BIO-MEDICAL EQUIPMENT TECHNICIAN

DUTIES:

- Serves as member of team with medical and nursing personnel in performing difficult or specialized treatments and examination.

- Plans, organizes and directs operations of bio-medical machine department; is responsible for administration and coordination of the service and maintenance of highest standards.

- Supervises technical and auxiliary staff assigned to various units, directs preparation of work schedules.

- Develops and formulates methods and procedures to govern operation of service; conducts continuing evaluation of effectiveness and recommends and implements necessary changes.

- Exercises central control over inventory, requisitioning, delivery and distribution of supplies and equipment.

- Establishes guidelines for inspection, maintenance and repair of equipment and supplies.

- Evaluates effectiveness of equipment; recommends and arranges for major replacements.

- Prepares budget requests for personal service, equipment and supplies.

- Directs establishment and maintenance of system of records and reports.

- Participates in studies and research projects.

- Provides consultative and technical advice to professional and technical personnel.

- Keeps abreast of current technical literature and puts into use new procedures previously approved by proper authority.

- Participates in planning and organizing on-the-job training and special training programs for medical, nursing and technical staff assigned to service; teaches selected subjects.

LANGUAGE SKILLS:

ENGLISH: Oral skills: directing operations of department working with patients; supervising auxiliary staff; providing advice to professional personnel; planning,
organizing on-the-job training; teaching. Reading and writing skills: record keeping; report writing; planning instruction; reading technical literature.

OTHER LANGUAGE: Oral skills: supervising auxiliary staff; working with patients; teaching; providing on-the-job training.

TRAINING REQUIREMENTS:

PRIOR: Two (2) years of satisfactory service as Bio-Medical Equipment Technician; or Associate of Arts degree, which included course in bio-medical technician field and three years experience in the appropriate bio-medical technician field in an approved hospital or health facility; or High school or equivalent and four years experience in the appropriate bio-medical technician field in an approved hospital or health facility; or a satisfactory equivalent combination of education and experience.

CONCURRENT: Union membership may be required in some areas.

TRAINING AVAILABILITY:

Junior and community colleges, colleges and universities, and vocational and technical schools offer accredited programs.

EARNINGS:

$16,628 to $19,310 per year, large urban area.

ADVANCEMENT OPPORTUNITIES:

None. This is the highest position.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: SENIOR X-RAY TECHNICIAN

DUTIES:

- Supervises and coordinates the activities of X-Ray Technicians and auxiliary personnel.
- Performs work of more than ordinary difficulty and responsibility in radiography; performs related work.
- Instructs X-Ray Technicians in taking of non-routine radiograms.
- Takes more difficult and highly specialized radiograms.
- Is responsible for the proper operation, maintenance and adjustment of equipment and the maintenance of an adequate stock of supplies.
- Trains new personnel in departmental methods and procedures.
- Prepares work schedules, keeps records and prepares reports.

LANGUAGE SKILLS:

ENGLISH: Oral skills: supervising, instructing, training technicians, auxiliary personnel; conversing with patient during treatment— instructing them. Reading and writing skills: preparing work schedules; record keeping; preparing reports.

OTHER LANGUAGE: Oral skills: supervising, instructing, training technicians, auxiliary personnel; conversing with patient during treatment.

TRAINING REQUIREMENTS:

PRIOR: High school or equivalent and five (5) years of experience as an X-ray technician; two (2) years of such experience must have been in a supervisory capacity in a hospital or equivalent institution; or completion of a 2-4 year program in radiography and experience as an X-Ray Technician.

CONCURRENT: Union membership may be required in some areas.
TRAINING AVAILABILITY:
Programs offered by hospitals, medical schools, colleges, universities, vocational and technical schools.

EARNINGS:
$17,914 to $18,355 per year, large urban area.

ADVANCEMENT OPPORTUNITIES:
To Supervisor of X-Ray Technician Services.

INTERNATIONAL OPPORTUNITIES:
Not applicable.
JOB TITLE: X-RAY (RADIOLOGIC) TECHNOLOGIST (RADIOGRAPHER)

DUTIES:

- Takes radiographs (X-rays) of parts of the body for use by a radiologist in diagnosing a problem.
- Follows a physician's requisition ordering the X-ray.
- Prepares patient for radiologic examination; assures that any articles which block the X-ray are removed, e.g., belt buckles, jewelry.
- Positions patient for X-ray.
- Surrounds exposed area with radiation protective devices, e.g., lead shields, to prevent unnecessary radiation on other parts of the body.
- Positions equipment to take X-ray.
- Measures thickness of section to be X-rayed.
- Sets controls on machine to ensure proper density, detail, and contrast; places X-ray film in proper position; makes exposures.
- Removes and develops film.
- Prepares and maintains patients' records.
- May maintain files, schedule appointments, prepare work schedules and manage radiology departments or facilities.
- Assists physician in performing fluoroscopic examination by preparing barium sulphate solution for patient to drink, preparing and positioning patient, adjusting machine, applying correct exposure, making any needed follow-up radiographs.
- In radiation therapy—assists radiologists by applying correct amount of radiation for the proper time period to the affected body parts; keeps records of treatment and is responsible for patient's comfort and safety during treatment.
- In nuclear medicine assists radiologist by preparing solutions of radioactive material that are absorbed by patient's internal organs. Uses special cameras, scanners, and other instruments that pick up and measure the intensity of the radioactivity.

LANGUAGE SKILLS:

ENGLISH: Oral skills: conversing with patients; putting them at ease; preparing patients for X-ray; explaining
procedures; taking and following instructions from supervising physician; telephone skills. Reading and writing skills: record keeping—preparation and maintenance.

OTHER LANGUAGE: Oral skills: conversing with patients; putting them at ease; preparing patients for X-ray; explaining procedures; telephone skills.

TRAINING REQUIREMENTS:

PRIOR: High school or equivalent required for training program entrance. Completion of a formal 2-4 year radiography program. For nuclear medicine or radiation therapy technologist: Registration with The American Registry of Radiologic Technologists and certification (completion of an additional year of combined classroom study and clinical education in area of specialization).

CONCURRENT: On-the-job training of policies and procedures.

TRAINING AVAILABILITY:

In 1981, 770 radiography programs were accredited by the Committee on Allied Health Education and Accreditation (CAHEA) of the American Medical Association (AMA). Programs offered by hospitals, medical schools, colleges, universities; military services; courses offered by vocational or technical schools.

EARNINGS:

1981 survey:

Private sector: average earnings:

starting: $13,600 per year.
experienced: $17,400 per year.
radiation therapy: $15,300-$18,900 per year.
nuclear medicine: $15,700-$19,400 per year.

Federal Government:

starting: $11,000 per year.

ADVANCEMENT OPPORTUNITIES:

Potential for advancement greater for technologists with a bachelor's degree—to educator, administrator. With experience to supervisory technologist to instructor (in large radiography department).

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: ELECTROENCEPHALOGRAPHIC (EEG) TECHNOLOGIST

DUTIES:

- Performs all the duties of an EEG technician, and:
  - can apply specific EEG techniques to the particular requirements of a patient.
  - may use EEG equipment in conjunction with other electrophysiologic monitoring devices, such as a tape recorder, computer, and video equipment.
  - can repair equipment if it is not working properly.
  - writes a descriptive report to accompany the EEG recordings.
  - supervises EEG technicians.
  - arranges work schedules of technicians.
  - teaches EEG techniques to technicians.
  - may have administrative duties, e.g., managing the laboratory, keeping records, scheduling appointments, ordering supplies.

LANGUAGE SKILLS:

ENGLISH: Oral skills: conversing with patients, explaining procedures. Reading and writing skills: record keeping, scheduling appointments, report writing.

OTHER LANGUAGE: Oral skills: conversing with patients, explaining procedures.

TRAINING REQUIREMENTS:

PRIOR: One (1) year of training, and one (1) year of laboratory experience; and, completion of a written and oral exam (administered by the American Board of Registration of Electroencephalograph Technologists [ABRET]).

CONCURRENT: On-the-job training in specific operations and procedures particular to the place of employment.

TRAINING AVAILABILITY:

Colleges and universities, junior colleges, medical centers, hospitals, and vocational or technical schools.
EARNINGS:

1981:

Private sector survey:

starting: $12,600 to $13,600 per year.

Higher pay for more experienced personnel; in teaching positions; as supervisors of EEG laboratories; as program directors of schools of EEG technology.

Federal Government: $11,000 to $16,800 per year.

ADVANCEMENT OPPORTUNITIES:

Successful completion of the ABRET registration examination leads to designation as a "Registered EEG Technologist" (R. EEG T.); makes better paying jobs easier to obtain. To Chief EEG technologist, supervisory positions, teaching new personnel.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: SUPERVISING MEDICAL RECORDS LIBRARIAN

DUTIES:

- Supervises the activities of the medical record program at a municipal hospital center.
- Trains subordinate medical record librarians.
- Plans, assigns, and reviews the work of record room personnel.
- Coordinates record room work with that of other units of the hospital center.
- Provides technical advice on record keeping and the use of standard terminology and established indices.
- Instructs physicians, nurses, and other hospital personnel in the use of the standard terminology of diseases and the operation index.
- Analyzes clinical records for completeness and accuracy and in the light of present and potential use.
- Makes studies and recommendations occasioned by unusual problems or changing diagnostic techniques.
- Prepares periodic reports, statistical abstracts, and other records and summaries.
- Develops comparative studies by hospitals and by services within hospitals and by diseases and operations.
- Assists the medical staff in selecting and collating records for medical research.
- Answers, in accordance with established policy, inquiries for information in hospital records.

LANGUAGE SKILLS:

ENGLISH: Oral skills: training staff; supervising activities; instructing other hospital personnel in use of records; answering questions; providing information. Reading and writing skills: record keeping; preparing reports; analyzing clinical records.

OTHER LANGUAGE: Oral skills: training staff; supervising activities; instructing other hospital personnel in use of records; answering questions; providing information.
TRAINING REQUIREMENTS:

PRIOR: One year of permanent service in the title of Senior Medical Record Librarian. Completion of a 2-year program, passing the Accredited Record Technician (ART) Exam.

CONCURRENT: Union membership may be required in some areas.

TRAINING AVAILABILITY:

Colleges with accreditation from American Medical Association (AMA) and American Medical Record Association (AMRA) have 2-year programs.

EARNINGS:

$19,142 to $20,542 per year, large urban area.

ADVANCEMENT OPPORTUNITIES:

None. This is the highest level.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: HOSPITAL CARE INVESTIGATOR

DUTIES:

- Performs in-depth financial interviews with patient, family, relatives and friends in hospital, office setting, or by telephone, to determine patient's and/or legally responsible relative's ability to pay for services rendered. Furnishes hospital rates.

- Facilitates processing of patient's application for third party benefits including, but not limited to, Medicaid and Medicare.

- Refers patients to various hospital departments and outside agencies to resolve ancillary problems through creating social service awareness in terms of potential eligibility for Medicaid, state unemployment insurance benefits, social security benefits, public assistance and related benefits.

- Conducts field investigations for those cases which cannot be thoroughly investigated at the hospital, in order to determine source of reimbursement.

- Reviews and abstracts medical charts to obtain pertinent information for accurately completing third party reimbursement (billing) forms, indicating proper treatment, discharge diagnosis, and overall patient information.

- Contacts outside agencies, organizations and individuals to obtain necessary information inquiring about potential sources of reimbursement, such as liability carriers, hospital insurance, workmen's compensation, etc., and interacts with agencies including social service and home care service, with reference to patient admissions and the maximization of hospital revenue.

- Reviews patient account records applicable to accounts prior to submission for billings.

- Prepares and analyzes reports and statistics for administrative purposes.

- Reviews and evaluates work prior to submission to insure accuracy and comprehensiveness, and prepares bills, appropriate transmittals and forms.
LANGUAGE SKILLS:

ENGLISH: Oral skills: interviewing, counseling, and instructing patients and families; conducting investigations; obtaining information from outside agencies, organizations; telephone skills. Reading and writing skills: filling out forms, applications; receiving, abstracting medical charts, records; report writing.

OTHER LANGUAGE: Oral skills: interviewing, counseling, and instructing patients and families; conducting investigations; working with community organizations; telephone skills

TRAINING REQUIREMENTS:

PRIOR: A bachelor's degree; or High school or equivalent and four (4) years of experience in activities concerning or relating to some of the following characteristics: accuracy in working out detailed plans for sources and uses of funds; and quantitative skills to insure proper billing and auditing procedures; or a satisfactory combination of education and experience (one academic year of college may be substituted for one year of experience up to a maximum of two years).

CONCURRENT: Union membership may be required in some locales.

TRAINING AVAILABILITY:

Colleges and universities, community organizations or public agencies (acquisition of interpersonal, interviewing skill...).

EARNINGS:

$14,375 to $19,475 per year, large urban area.

ADVANCEMENT OPPORTUNITIES:

To Senior Hospital Investigator. Lateral transfers to other departments in the health care facility, other agencies.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: SENIOR HOSPITAL CARE INVESTIGATOR

DUTIES:

- Supervises a unit engaged in medical assistance, investigation activities, assigning and controlling the flow of work, training and advising subordinates in difficult matters, evaluating staff and recommending appropriate personnel action when indicated.

- Reviews case records and/or recommendations for approval or denial and for appropriateness of category of assistance.

- Authorizes or denies medical assistance for in-patient care and determines eligibility for other medical assistance.

- May conduct special or emergency investigations, or investigations of a more difficult or complex nature.

- Interprets departmental, city, State and Federal rules and regulations for the unit staff.

- Maintains statistical records and prepares status reports.

LANGUAGE SKILLS:

ENGLISH: Oral skills: supervising, training and advising staff; conducting investigations. Reading and writing skills: technical literature concerning State and Federal rules and regulations, report preparation; reviewing case records.

OTHER LANGUAGE: Oral skills: supervising, training and advising staff; conducting investigations.

TRAINING REQUIREMENTS:

PRIOR: Permanently employed as a Hospital Care Investigator; and has served as a permanent employee in such title in the department for six months or more.

CONCURRENT: Union membership may be required in some areas.

TRAINING AVAILABILITY:

Colleges and universities, community organizations or public agencies (acquisition of interpersonal, interviewing skills).
EARNINGS:
$17,875 to $22,875 per year, large urban area.

ADVANCEMENT OPPORTUNITIES:
To Supervising Hospital Care Investigator.

INTERNATIONAL OPPORTUNITIES:
Not applicable.
HEALTH CARE TECHNOLOGISTS AND TECHNICIANS
CAREER PROGRESSION LADDER

Supervisory Positions

Chief Technologist

*Technologist

*Senior Technician

*Technician

*Asst. Technician

Asst. Operating Room Administrator

Asst. Operating Room Supervisor

*Operating Room Technician

*Medical Record Technician

*Medical Record Clerk

*Supervising Medical Records Librarian

*Medical Record Librarian

*Nursing Aide

*Orderly (Transporter)

* = Job descriptions included in this chapter.
HEALTH CARE
EMERGENCY MEDICAL SERVICES (EMS)
CAREER PROGRESSION LADDER

Emergency Medical
Services Coordinator

Chief, Paramedic Division

Supply Officer

Training Officer

Paramedic Field Supervisors

Clerk

Assignment Officer

* EMT-Paramedic

* EMT-Intermediate

* Emergency Medical Technician
  (Ambulance Corpsman)

* = Job descriptions included in this chapter.
**CHAPTER IX**

**HOTEL OCCUPATIONS**

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<td>187</td>
</tr>
<tr>
<td>Career progression ladder</td>
<td>189</td>
</tr>
</tbody>
</table>
Prerequisites for Bilingual Vocational Training Project Development

Six hotel occupations are described in this chapter. These are:

- Bellhop (Bellman);
- Hotel Housekeeper and Assistant;
- International Representative;
- Hotel Front Office Clerk (Receptionist, Cashier); and,
- Hotel Manager and Assistant Manager.

For entry positions in the hotel occupations, e.g., bellhop, housekeeper, and front office clerk, there are no educational requirements. A high school education or possession of an equivalency diploma is helpful for being hired. Front office clerks preferably should have bookkeeping and clerical skills; in addition, knowledge of office machine operation and data processing is a great asset because of the use of computerized front office systems. Hotel experience is extremely important for advancing to managerial positions. A bachelor's degree in hotel and restaurant administration is also strong preparation for these positions and an advantage to the job applicant in obtaining a position and advancing to others. Strong competition is anticipated. Training programs are available throughout the country; they are offered by colleges and universities, junior colleges, technical institutes, and the Educational Institute of the American Hotel and Motel Association. If a bilingual vocational training program is being planned, suggested courses to include are: hotel administration, accounting, economics, data processing, housekeeping, food service management and catering, and hotel maintenance engineering.

Earnings for hotel occupations vary by locale and type of facility. Large, luxury hotels and those in resort and large metropolitan areas pay higher wages than less expensive hotels. There are greater advancement opportunities in large hotels and in hotel/motel chains, where transfers can include promotions. It should be noted that jobs may be seasonal.
For all of the hotel positions described, it is important that employees know how to converse and make reservations by telephone, handle customers, help them solve their problems, and be able to deal with a wide variety of clientele who may be upset or anxious. These types of skills should be emphasized in both English and other languages, because employers do find a need for workers with ability in several languages. Reading and writing skills to be stressed in a training program include filling out registration forms, writing messages, and filling out time sheets.

Employment projections

Employment projections are available for only one occupation that is specific to the hotel/motel industry--housekeepers. The rate of growth of employment to 1990 of hotel and motel housekeepers is expected to be about 60 percent greater than the rate for all occupations combined. The rate of employment growth for desk clerks, many of whom are employed in the hotel/motel industry, is expected to be about one-third higher than for all occupations combined.
### TABLE 9
#### HOTEL OCCUPATIONS

**Prerequisites for Job Placement**

<table>
<thead>
<tr>
<th>Job Title</th>
<th>Education</th>
<th>Training/Experience</th>
<th>Language Skills Required</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>English</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Oral</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Oral</td>
</tr>
<tr>
<td>Front Office (Assistant)</td>
<td>College preferred.</td>
<td>Hotel experience very important; number of years varies.</td>
<td>Supervising hotel staff; helping guests.</td>
</tr>
<tr>
<td>Manager</td>
<td></td>
<td></td>
<td>Record keeping; report writing.</td>
</tr>
<tr>
<td>Front Office Clerk</td>
<td>High School or equivalent.</td>
<td>Bookkeeping, clerical skills.</td>
<td>Answering questions; providing information; making reservations; telephone skills.</td>
</tr>
<tr>
<td></td>
<td>College helpful for advancement.</td>
<td></td>
<td>Filling out forms; taking messages.</td>
</tr>
<tr>
<td>International Representative</td>
<td>College desirable.</td>
<td>Hotel background.</td>
<td>Giving directions; making arrangements; telephone skills; providing directions.</td>
</tr>
<tr>
<td>Bell Captain</td>
<td></td>
<td></td>
<td>Supervising, training bellhops.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Work schedules; time records.</td>
</tr>
<tr>
<td>Bellhop; Housekeeper</td>
<td>High school helpful.</td>
<td>Knowledge of local area.</td>
<td>Greeting guests; solving problems; handling complaints.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Housekeeper: Ordering supplies; keeping records; writing reports.</td>
</tr>
</tbody>
</table>

Job titles are listed in order of advancement. Further details are provided in the job descriptions for each job title. Additional job titles are included in the career progression ladder to show advancement opportunities.
Table 10
Employment in Hotel Occupations
Actual 1978 and Projected 1990

<table>
<thead>
<tr>
<th></th>
<th></th>
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<tbody>
<tr>
<td></td>
<td>1978</td>
<td>1990</td>
</tr>
<tr>
<td>ALL OCCUPATIONS COMBINED</td>
<td>97,610</td>
<td></td>
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<tr>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLERICAL WORKERS</td>
<td>17,820</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Desk Clerks</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SERVICE WORKERS</td>
<td>14,414</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SELECTED PERSONAL SERVICE WORKERS</td>
<td>1,547</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housekeepers, Hotel Motel</td>
<td>94</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Employment projections are based on data from the U.S. Bureau of Labor Statistics. For each industry, employment in 1978 is shown, and three series of employment projections are shown for 1990: Low (L), Medium (M) and High (H). For comparison, projections also are shown (in capital letters) for all occupations combined and for the major occupational groups of which the occupations studied are a part. The projections are explained and additional detail is provided in Appendix A.
HOTEL OCCUPATIONS
LISTING OF CORPORATIONS/ORGANIZATIONS

DATA SOURCES

- Hyatt Regency Hotel, Washington, D.C.
- Marriott Corporation, Washington, D.C.
- San Franciscan Hotel, CA
- Waldorf - Astoria Hotel, NY

ADDITIONAL INFORMATION

- Directory of colleges, schools with programs, courses in hospitality education:
  - Council on Hotel Restaurant, and Institutional Education
    Human Development Building
    Room 118
    University Park, PA 16802

- Careers in housekeeping, schools offering programs in institutional housekeeping management:
  - National Executive Housekeepers Association, Inc.
    Building & Professional Building
    414 Second Avenue
    Gallipolis, OH 45601

- Careers, scholarships:
  - The American Hotel & Motel Association
    148 7th Avenue
    New York, NY 10019

CORPORATION/AGENCY LISTING JOB OPPORTUNITIES

- Ramada Inn of Beverly Hills
- Le Parc Hotel De Luxe
- Los Angeles Hilton
- Barclay Inter-Continental Hotel
- Hotel

LOCATION

- Los Angeles, CA
- New York, NY
- San Fernando, CA
JOB TITLE: BELLHOP (BELLMAN)

DUTIES:

- Meets and greets guests of the hotel in a friendly, courteous and efficient manner.
- Escorts incoming hotel guests to rooms.
- Assists guests with hand luggage.
- Explains hotel facilities and services to guests checking in while transporting their luggage.
- Inspects guests' rooms.
- Pages guests in lobby, dining room or other parts of hotel.
- Delivers messages; runs errands.
- May deliver room service orders, packages, suitcases and trunks.
- May execute room changes at the request of management.

LANGUAGE SKILLS:

ENGLISH: Oral skills: meeting, greeting, and assisting guests; explaining hotel facilities and services to guests; delivering messages.

OTHER LANGUAGE: Oral skills: meeting, greeting, and assisting guests; explaining hotel facilities and services to guests; delivering messages.

TRAINING REQUIREMENTS:

PRIOR: High school not essential, but helpful for promotion. Knowledge of local area an asset.

CONCURRENT: On-the-job training, conducted by bell captain or experienced bellhops.

TRAINING AVAILABILITY:

In-house, any hotel, motel or resort.

EARNINGS:

1980:

starting: $6,700 to $12,500 plus tips, per year.
ADVANCEMENT OPPORTUNITIES:

Can be promoted to desk clerk, reservation clerk, especially with high school education. Also, to bell captain, superintendent of service.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: HOTEL HOUSEKEEPER AND ASSISTANT

DUTIES:

- Responsible for keeping hotels and motels clean and attractive and providing guests with the necessary furnishings and supplies.
- Makes inspections to determine if cleanliness standards are being maintained.
- Hire, trains, schedules and supervises the housekeeping staff, including linen and laundry workers and repairers.
- Evaluates effectiveness of housekeeping program.
- Keeps employees' records and orders supplies.
- Prepares budgets and budget requests. Submits reports to the general manager on the conditions of rooms, needed repairs and improvements.
- Purchases supplies and furnishings.
- Makes improvements in methods and techniques; studies new cleaning equipment and supplies.

LANGUAGE SKILLS:

ENGLISH: Oral skills: hiring, training, supervising housekeeping staff; ordering supplies; assisting guests. Reading and writing skills: record keeping, preparing budgets, studying new techniques, equipment.

OTHER LANGUAGE: Oral skills: hiring, training, supervising housekeeping staff; assisting guests.

TRAINING REQUIREMENTS:

PRIOR: High school not required, but preferred. Experience or training helpful.

CONCURRENT: On-the-job training.

TRAINING AVAILABILITY:

Colleges and technical institutes offer instruction in housekeeping. The Educational Institute of the American Hotel and Motel Association offers courses for classroom or home study.
EARNINGS:

1980:

starting: $7,500 to $40,000 per year.
average: $20,000 per year.

ADVANCEMENT OPPORTUNITIES:

Assistant housekeepers to executive housekeepers. Opportunities are limited. Applicants with degrees or courses in institutional housekeeping management have the best advancement opportunities.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: BELL CAPTAIN

DUTIES:

- Supervises service staff.
- Calls Bellhops to escort guests.
- Determines work schedules and keeps time records.
- Trains new employees.
- Inspects workers for neatness and uniform dress.
- Instructs workers in procedures regarding requests from guests.
- Furnishes information, makes reservations and obtains tickets for guests to social and recreational events.
- Handles guests' complaints about the department.
- May report suspicious behavior of patrons to hotel security personnel.

LANGUAGE SKILLS:

ENGLISH: Oral skills: providing guests with information; telephone skills; making reservations; solving problems, complaints; supervising and instructing workers. Reading and writing skills: keeps records.

OTHER LANGUAGE: Oral skills: providing guests with information and assistance; telephone skill; making reservations; supervising and instructing workers.

TRAINING REQUIREMENTS:

PRIOR: High school not necessary, but helpful. Knowledge of the local area is an asset.

CONCURRENT: On-the-job training. Union membership: Hotel and Restaurant Employees and Bartenders International Union; Service Employees International Union.

TRAINING AVAILABILITY:

In-house, any hotel, motel or resort.

EARNINGS:

Depends on location, size and type of hotel. Large expensive hotels, those in metropolitan and resort areas pay employees more, in general, than small less expensive hotels.
ADVANCEMENT OPPORTUNITIES:

Can advance to superintendent of service.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: INTERNATIONAL REPRESENTATIVE

DUTIES:

- Assists guests when hotel front office personnel cannot be of assistance.
- Makes theater reservations, transportation arrangements, works out an itinerary for guest.
- May write welcome letters to guests from abroad in their native language.
- Provides directions, maps of city.
- May purchase tickets.

LANGUAGE SKILLS:

ENGLISH: Oral skills: assisting guests; making dining, theater reservations; providing directions; telephone skills. Reading and writing skills: letter writing; itinerary preparation.

OTHER LANGUAGE: Oral skills: assisting guests; telephone skills; providing directions. Reading and writing skills: letter writing; itinerary preparation.

TRAINING REQUIREMENTS:

PRIOR: Hotel background, college training desirable. Knowledge of 2 to 3 languages other than English. Knowledge of the city of employment.

CONCURRENT: On-the-job training, approximately 1 week, working with experienced personnel.

TRAINING AVAILABILITY:

In-house training. General college training, hotel training divisions.

EARNINGS:

$12,000 per year, large urban area.

ADVANCEMENT OPPORTUNITIES:

To (assistant) managerial positions.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: HOTEL FRONT OFFICE CLERK (RECEPTIONIST, CASHIER)

DUTIES:

- Handles room reservations, usually on a computerized system, verifies information, greets guests, assigns rooms, issues keys and collects payments.
- May also function as bookkeeper, cashier or telephone operator.
- Receives mail, provides information, helps with guests' problems.
- Answers questions about hotel services, checkout time or parking facilities.
- Fills out guests' registration forms.
- Records written or telephoned requests for rooms.
- Notifies room clerks of guests' arrival times.

LANGUAGE SKILLS:

ENGLISH: Oral skills: answering questions; greeting guests; helping guests with problems; making room reservations; telephone skills. Reading and writing skills: filling out registration forms; writing phone messages.

OTHER LANGUAGE: Oral skills: answering questions; greeting guests; making room reservations; telephone skills; helping with problems.

TRAINING REQUIREMENTS:

PRIOR: High school with clerical aptitudes. Knowledge of bookkeeping helpful in small hotels. College not required but is an asset for advancement to management.

CONCURRENT: Brief period of on-the-job training describing duties of job, information about the hotel. Some received training in data processing for use with computerized front office systems.

TRAINING AVAILABILITY:

Study courses in hotel management sponsored by the Educational Institute of the American Hotel and Motel Association.
EARNINGS:

1980:

starting: $7,500 to $14,600 per year in large urban areas and resort areas.

ADVANCEMENT OPPORTUNITIES:

Front office to managerial positions. Clerk may advance to assistant front office manager, then to front office manager. College degree is an asset for advancement to management.

INTERNATIONAL OPPORTUNITIES:

May move into an International division of a hotel with appropriate hotel background and experience. Usually, these are sales positions.
JOB TITLE: HOTEL MANAGER AND ASSISTANT MANAGER

DUTIES:

- Determines room rates and credit policy; directs the food service operation.
- Manages the housekeeping, accounting, security and maintenance departments of hotel.
- Working with guests on an individual basis, handling complaints, solving problems.
- In small hotels - front office duties, taking reservations and assigning rooms, as well as above duties.

LANGUAGE SKILLS:

ENGLISH: Oral skills: conversing with the public, solving guests' problems, handling complaints, telephone skills, giving instructions to other staff. Reading and writing skills: taking reservations, checking computer system for reservations, filling out forms, report writing, record keeping.

OTHER LANGUAGE: Oral skills: conversing with the public; solving guests' problems; complaints; telephone skills; giving instructions to other staff.

TRAINING REQUIREMENTS:

PRIOR: Experience very important. High school or equivalent usually required. College education preferred.

CONCURRENT: Some large hotels sponsor specialized, on-the-job management training. Others help finance training in hotel management.

TRAINING AVAILABILITY:

Four year programs offered by over 80 colleges and universities in 1980.

EARNINGS:

1981 survey:

Depends on location, size and type of hotel.

Experienced managers: $20,000 to $80,000 per year.

Assistant Managers: $14,500 to $16,000 per year.
ADVANCEMENT OPPORTUNITIES:

Front office clerks to assistant manager to general manager.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
* = Job descriptions included in this chapter.
HOTEL CAREER PROGRESSION LADDER

GENERAL MANAGER

Executive Chef*

Executive Sous Chef

Sous Chef

Banquet Chef

Pastry Chef

* See Foodservice Career Progression Ladder for more detail.
HOTEL
CAREER PROGRESSION LADDER

GENERAL MANAGER

Personnel Director

Asst. Personnel Director

Employment Interviewers

Director of Engineering

Chief Engineer

Asst. Chief Engineer

Custodian
## CHAPTER X

**MEDIA OCCUPATIONS**

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<td>203</td>
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<tr>
<td>Announcer, Radio and Television</td>
<td>205</td>
</tr>
<tr>
<td>Reporter, Radio and Television</td>
<td>207</td>
</tr>
<tr>
<td>Reporter, Newspaper</td>
<td>207</td>
</tr>
<tr>
<td>Career progression ladder</td>
<td>209</td>
</tr>
</tbody>
</table>
MEDIA OCCUPATIONS

Prerequisites for Bilingual Vocational Training Project Development

Job descriptions for four media occupations are presented in this chapter. These are:

- Broadcast Technician;
- Announcer, Radio and Television;
- Reporter, Radio and Television; and,
- Reporter, Newspaper.

Broadcast Technician, the entry level occupation, has no prior education, training, or experience requirements. Courses that would be helpful to the job applicant include: algebra and trigonometry, physics, electronics, and other sciences. English classes should place emphasis on teaching trainees to give directions to other studio personnel. Individuals seeking employment as technicians face keen competition, especially in large cities where there are large numbers of qualified applicants. Knowledge of languages other than English can be extremely important, especially for working in stations that broadcast in a language other than English.

For announcers and reporters, a college education is extremely valuable. Many employers prefer workers to have bachelor's or master's degrees. In stations that broadcast in a language other than English, this level of educational attainment may not be necessary. Training for these positions is offered by community and junior colleges, and colleges and universities. There is very strong competition for these positions; therefore, applicants must be well prepared, i.e., college education and reporting experience.

Jobs are easier to obtain in radio and in small stations, where beginners are more likely to be hired than in television. Earnings are also relatively low.
Employment projections

Expected employment growth rates are substantially higher than the average for radio and TV announcers, reporters and correspondents, and writers and editors.
<table>
<thead>
<tr>
<th>Job Title</th>
<th>Education</th>
<th>Training/Experience</th>
<th>Language Skills Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reporter, Radio and Television</td>
<td>College preferred - degree in journalism</td>
<td>Courses in English and other languages; journalism, social studies and typing.</td>
<td>English: Giving reports on the air; interviewing. Other Language: Gathering information; doing research for a story.</td>
</tr>
<tr>
<td>Broadcast Technician</td>
<td>Training an advantage. Courses in algebra, physics, electronics, sciences very valuable.</td>
<td>Giving technical directions to studio personnel.</td>
<td>English: Giving technical directions to studio personnel. Other Language:</td>
</tr>
</tbody>
</table>
# Table 12

Employment in Media Occupations
Actual 1978 and Projected 1990*

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1978</td>
<td>1990</td>
</tr>
<tr>
<td>ALL OCCUPATIONS COMBINED</td>
<td>97,610</td>
<td>L: 119,590</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M: 121,447</td>
</tr>
<tr>
<td></td>
<td></td>
<td>H: 129,907</td>
</tr>
<tr>
<td>PROFESSIONAL, TECHNICAL AND RELATED WORKERS</td>
<td>15,570</td>
<td>L: 20,038</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M: 20,295</td>
</tr>
<tr>
<td></td>
<td></td>
<td>H: 21,119</td>
</tr>
<tr>
<td>SELECTED WRITERS, ARTISTS AND ENTERTAINERS</td>
<td>888</td>
<td>L: 1,117</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M: 1,134</td>
</tr>
<tr>
<td></td>
<td></td>
<td>H: 1,198</td>
</tr>
<tr>
<td>Radio and TV Announcers</td>
<td>46</td>
<td>L: 66</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M: 66</td>
</tr>
<tr>
<td></td>
<td></td>
<td>H: 68</td>
</tr>
<tr>
<td>Reporters and Correspondents</td>
<td>54</td>
<td>L: 68</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M: 70</td>
</tr>
<tr>
<td></td>
<td></td>
<td>H: 74</td>
</tr>
<tr>
<td>Writers and Editors</td>
<td>109</td>
<td>L: 142</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M: 146</td>
</tr>
<tr>
<td></td>
<td></td>
<td>H: 155</td>
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</tbody>
</table>

*Employment projections are based on data from the U.S. Bureau of Labor Statistics. For each industry, employment in 1978 is shown, and three series of employment projections are shown for 1990: Low (L), Medium (M), and High (H). For comparison, projections also are shown (in capital letters) for all occupations combined and for the major occupational groups of which the occupations studied are a part. The projections are explained and additional detail is provided in Appendix A.
MEDIA OCCUPATIONS
LISTING OF CORPORATIONS/ORGANIZATIONS

DATA SOURCES

- KBRG Radio, CA
- SINO Broadcast, NY

ADDITIONAL INFORMATION

- Programs and courses in broadcasting:
  --Broadcast Education Association
  1771 N Street, N.W.
  Washington, D.C. 20036

- FCC Licensure:
  --Federal Communications Commission
  1919 M Street, N.W.
  Washington, D.C. 20554

- Career information, pamphlets:
  --American Newspaper Publishers Association Foundation
  The Newspaper Center
  Box 17407
  Dulles International Airport
  Washington, D.C. 20041

  --Association for Education in Journalism
  University of South Carolina
  School of Journalism
  Columbia, SC 29208

- Careers in journalism, college/university degree programs, scholarships, internships:
  --The Newspaper Fund, Inc.
  P.O. Box 300
  Princeton, NJ 08540

- Junior/community college programs:
  --National Community College Journalism Association
  San Antonio College
  1300 San Pedro Avenue
  San Antonio, TX 78284
• Union wage rates for reporters:
  --The Newspaper Guild
  Research and Information Department
  1125 15th Street, N.W.
  Washington, D.C. 20005

• Schools with accredited programs in journalism departments:
  --Accrediting Council on Education for Journalism
  and Mass Communication
  School of Journalism
  University of Missouri
  Columbia, MO 65205

• Opportunities for women in media occupations: request "Careers in Communications" from:
  --Women in Communications, Inc.
  P.O. Box 9561
  Austin, TX 78766

CORPORATIONS/AGENCY LISTING JOB OPPORTUNITIES

• Voice of America
• Los Angeles Central EDD

LOCATION

• New York, NY
• Los Angeles, CA
JOB TITLE: BROADCAST TECHNICIAN

DUTIES:

- Operates and maintains electronic equipment used to record and transmit radio and television programs.
- Works with microphones, sound and video tape recorders, light and sound effects, television cameras, transmitters, and other equipment.
- Operates equipment regulating signal strength, clarity, range of sounds and colors in the material being recorded or broadcast.
- Operates control panels that select the source of the material being broadcast.
- Gives technical directions to personnel in the studio using hand signals and telephone headsets.
- For broadcasting outside the studio, goes to site, sets up, tests, and operates the equipment.
- Specialization of duties varies by size of station. Job titles: transmitter operator, maintenance technician, audio control engineer, video control engineer, lighting technician, field technician, recording technician, video recording technician.

LANGUAGE SKILLS:

ENGLISH: Oral skills: following instructions, giving directions to studio personnel. Reading and writing skills: operating equipment, completion of licensing examination.

OTHER LANGUAGE: Oral skills: giving directions, following instructions - when working with personnel who are using languages other than English.

TRAINING REQUIREMENTS:

PRIOR: High School helpful, especially courses in algebra, trigonometry, physics, electronics.

CONCURRENT: Restricted radio telephone operator permit required for radio and television broadcast transmitter operators (no examination required).

General radiotelephone operator license required for microwave or other internal radio communications equipment workers (a series of written examinations required).
TRAINING AVAILABILITY:

Technical schools, community colleges, colleges,

EARNINGS:

1980 survey: average earnings:

radio stations: $13,620 per year

television stations: $15,340 per year

Earnings are highest in large cities and large stations and for licensed technicians.

ADVANCEMENT OPPORTUNITIES:

With experience, skills, to top level technical positions, e.g., supervisory technician, chief engineers, College degree in engineer increasingly important for advancement to supervisory and executive positions.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: ANNOUNCER, RADIO AND TELEVISION

DUTIES:

- Memorizes or reads script, or ad-libs to identify station, introduces and closes shows, announces station breaks, commercials or public service information.
- Cues workers to transmit program from network central station or other pick-up points according to schedule.
- Reads news flashes to keep audience informed of important happenings.
- Introduces guests and musical selections.
- In small stations, may operate the control board, sell time and write commercial and news copy.

LANGUAGE SKILLS:

ENGLISH: Oral skills: clear pronunciation; good grammar, vocabulary, conversational skills, may write commercials, news items.

OTHER LANGUAGE: Oral skills: clear pronunciation; good conversational skills.

TRAINING REQUIREMENTS:

PRIOR: Formal training in a college or technical school valuable. High school courses in English, public speaking, dramatics, languages other than English, and valuable background. Liberal arts college education excellent background.

CONCURRENT: On-the-job training to learn procedures, operations, policies of station.

TRAINING AVAILABILITY:

Private broadcasting schools, universities.

EARNINGS:

1980:
beginning: $7,800 to $8,300 per year in small stations.
ADVANCEMENT OPPORTUNITIES:

After acquiring experience in small community stations, move to a job in a large city. Advance to disc-jockey, sportscaster or other specialist.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: REPORTER, RADIO, TELEVISION, NEWSPAPER

DUTIES:

- Receives assignment or evaluates leads and news tips to develop story idea.
- Gathers and verifies factual information regarding story through interviewing, observation and research.
- Organizes material, determines slant or emphasis and writes story according to prescribed editorial style and format standards.
- May specialize in one type of reporting or be assigned to outlying areas, or foreign countries (correspondent).

Radio and Television:

- May give live reports from site of event or mobile broadcast unit.

Newspaper:

- May begin as a "cub reporter", gathering research in a particular department.
- Types and edits on a central processing unit.
- On small weeklies, may solicit advertisements, sell subscriptions and perform general office work.

LANGUAGE SKILLS:

ENGLISH: Oral skills: interviewing; making contacts to obtain information; for radio/TV: speaking clearly, in a conversational style. Reading and writing skills: for radio/TV: data collecting; researching literature; writing a story, usually short; for newspaper: data collecting; researching literature; writing articles.

OTHER LANGUAGE: Oral skills: interviewing, making contacts to obtain information; for radio/TV: speaking clearly; good pronunciation, accent.

TRAINING REQUIREMENTS:

PRIOR: College education is preferred, with a degree in journalism. Important high school courses include English, journalism, social studies and typing. Knowledge of news photography valuable. Ability to take shorthand useful. Some editors prefer applicants with a
bachelor's degree in liberal arts and a master's degree in journalism. Degrees not necessary for community work.

CONCURRENT: On-the-job training.

TRAINING AVAILABILITY:

Colleges and universities; community and junior colleges, Armed Forces.

EARNINGS:

1980:

beginning: $8,580 to $30,524 per year.
4-5 years experience: $15,600 to $32,030 per year.

ADVANCEMENT OPPORTUNITIES:

Competition very strong, difficult to advance. Some reporters become columnists, correspondents, editorial writers, editors or top executives or transfer to public relations, writing for magazines, or preparing copy for radio and TV news programs.

INTERNATIONAL OPPORTUNITIES:

Radio and television stations as well as newspaper publishers send correspondents overseas. Knowledge of another country and language important in being assigned overseas work.
MEDIA

CAREER PROGRESSION LADDER

General Manager

Editor in Chief

Vice Editor in Charge

Editor

* Announcer — Translator — *Reporter (Correspondent)

* Broadcast Technician

* Job descriptions included in this chapter.
CHAPTER XI
NURSING OCCUPATIONS

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  Head Nurse .................................................... 227

Career progression ladder .................................... 229
Four nursing occupations are described in this chapter. These are:

- Licensed Practical (Vocational) Nurse (LPN, LVN);
- Registered Nurse (RN);
- Nurse-Midwife; and,
- Head Nurse.

The entry level for the occupation is licensed practical (vocational) nurse (LPN, LVN). Individuals can be trained in this occupation in a one-year program to include classroom instruction and clinical practice. Passing a written examination is required for employment as well as for licensing. Bilingual vocational training can be provided in this occupation, with emphasis on the following types of language skills: explaining procedures to patients; assisting physicians; providing instruction in home care to patients and their families. Medical terminology is an important part of the English class.

Three types of training programs for registered nurses are available. These are:

- 2-year associate degree programs, offered by community and junior colleges;
- 3-year diploma programs, by hospitals and schools; and,
- 4-5-year bachelor's degree programs, in colleges and universities.

To be admitted to any of these programs, a high school diploma is required. The kind of program affects the opportunities open to graduates of the training program, e.g., a bachelor's degree is required for jobs in public health agencies, for research, consulting, teaching or a clinical specialization.

Training for the nursing occupations includes clinical practice as well as classroom instruction. Bilingual vocational training program administrators can coordinate with community agencies and health clinics to
provide an opportunity for trainees to obtain clinical practice. This would also open up possible job placement opportunities for graduates. In addition, certification requirements vary by State, and should be verified.

The job outlook for nurses is favorable since there is a widespread shortage of nurses at the present time. The shortage will primarily exist in rural areas and large metropolitan hospitals.

Employment projections

Occupations in the nursing field are expected to expand rapidly until 1990, both in percentage terms and in the absolute number of new jobs. The projected rate of growth for these occupations is about twice as high as the rate for all occupations combined. Moreover, nurse's aides and orderlies, professional nurses and licensed practical nurses are among the 20 fastest growing occupations in terms of number of new jobs, with more than 1.2 million jobs expected to be added by 1990.
<table>
<thead>
<tr>
<th>Job Title</th>
<th>Education</th>
<th>Training/Experience</th>
<th>Language Skills Required</th>
<th>Other Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervisor of Nurses</td>
<td>Bachelor's degree</td>
<td>Same as head nurse AND 3 years nursing experience.</td>
<td>Oral: Coordinating, directin g implementation of nursing service.</td>
<td>Oral: None</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Reading/Writing: Defining, maintaining standards; reviewing, analyzing trends.</td>
<td></td>
</tr>
<tr>
<td>Head Nurse</td>
<td>Same as RN AND nursing experience (varies by employer)</td>
<td>Supervising, instructing, assisting nursing staff; giving lectures.</td>
<td>Oral: Supervising, instructing, assisting nursing staff; giving lectures.</td>
<td></td>
</tr>
<tr>
<td>Registered Nurse (RN)</td>
<td>High school required</td>
<td>2 to 5-yr. training program AND passing a written state board examination.</td>
<td>Oral: Taking medical history; explaining procedures to patients; assisting physicians, supervising LPNs.</td>
<td>Oral: None</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Reading/Writing: Reviewing records.</td>
<td></td>
</tr>
<tr>
<td>Licensed Practical (Vocational) Nurse (LPN) (LVN)</td>
<td>Completion of 8th-9th grade minimum</td>
<td>1-yr. training program (classroom + clinical practice)</td>
<td>Oral: Explaining procedures to patients; assisting physicians; instructing families on health care.</td>
<td>Oral: None</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Reading/Writing: Recording medication, treatment on patient charts.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Other Language: None.</td>
<td></td>
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</tr>
</tbody>
</table>

Job titles are listed in order of advancement. Further details are provided in the job descriptions for each job title. Additional job titles are included in the career progression ladder to show advancement opportunities.
### Table 14

**Employment in Nursing Occupations**

*Actual 1978 and Projected 1990*

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</thead>
<tbody>
<tr>
<td></td>
<td>1978</td>
<td>1990</td>
</tr>
<tr>
<td>ALL OCCUPATIONS COMBINED</td>
<td>97,610</td>
<td>M: 121,447</td>
</tr>
<tr>
<td></td>
<td></td>
<td>H: 127,907</td>
</tr>
<tr>
<td>PROFESSIONAL, TECHNICAL AND RELATED WORKERS</td>
<td>15,570</td>
<td>L: 20,038</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M: 20,295</td>
</tr>
<tr>
<td></td>
<td></td>
<td>H: 21,119</td>
</tr>
<tr>
<td>MEDICAL WORKERS, EXCEPT TECHNICIANS</td>
<td>2,026</td>
<td>L: 2,928</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M: 2,954</td>
</tr>
<tr>
<td></td>
<td></td>
<td>H: 3,094</td>
</tr>
<tr>
<td>Nurses, Professional</td>
<td>1,026</td>
<td>L: 1,542</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M: 1,551</td>
</tr>
<tr>
<td></td>
<td></td>
<td>H: 1,618</td>
</tr>
<tr>
<td>HEALTH TECHNOLOGISTS AND TECHNICIANS</td>
<td>1,246</td>
<td>L: 1,811</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M: 1,820</td>
</tr>
<tr>
<td></td>
<td></td>
<td>H: 1,906</td>
</tr>
<tr>
<td>Licensed Practical Nurses</td>
<td>491</td>
<td>L: 707</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M: 717</td>
</tr>
<tr>
<td></td>
<td></td>
<td>H: 752</td>
</tr>
</tbody>
</table>

*Employment projections are based on data from the U.S. Bureau of Labor Statistics. For each industry, employment in 1978 is shown, and three series of employment projections are shown for 1990: Low (L), Medium (M) and High (H). For comparison, projections also are shown (in capital letters) for all occupations combined and for the major occupational groups of which the occupations studied are a part. The projections are explained and additional detail is provided in Appendix A.*
DATA SOURCES

- Fairfax Hospital, VA
- Gouverneur Hospital, NY
- Northern Virginia Mental Health Center, VA
- St. Mary's Hospital and Medical Center, CA

ADDITIONAL INFORMATION

- For materials about nursing, nursing education, approved nursing schools:
  - Career Information Services
  National League for Nursing
  10 Columbus Circle
  New York, NY 10009

- For information about practical nursing, list of State approved training programs:
  - National Association for Practical Nurse Education & Service, Inc.
  122 E. 42nd Street
  Suite 800
  New York, NY 10017

- For information about a career in practical nursing:
  - National Federation of Licensed Practical Nurses, Inc.
  250 W. 57th Street
  New York, NY 10019

- For information about employment opportunities:
  -- In Veterans Administration Hospital
  -- Local Veterans Administration Hospitals
  -- Department of Medicine and Surgery
  Veterans Administration
  Washington, D.C. 20420
  -- Hospitals
  -- Nursing Homes
  -- Rehabilitation Centers
  -- Psychiatric Hospitals
  -- Long-term Care Facilities
  -- Openings, training opportunities:
- Local hospitals
- Community health centers

CORPORATION/AGENCY LISTING JOB OPPORTUNITIES

- French hospital

LOCATION

Los Angeles, CA
JOB TITLE: LICENSED PRACTICAL (VOCATIONAL) NURSE (LPN, LVN)

DUTIES:

- **Gives nursing care to patients as assigned by and under the supervision of a professional nurse, including bladder catheterizations, vaginal irrigations, administering tube feedings, oxygen.**

- **Administers and records medications and treatments, e.g., oxygen, narcotics, hypnotics.**

- **Prepares for and assists physicians and others with diagnostic procedures and treatments.**

- **Reinforces, supports and provides health care instruction to patients and their families.**

- **Participates with other team members in planning, implementing and evaluating nursing care and other patient activities.**

- **Assists in the admission, transfer and discharge of patients.**

- **Observes and reports patients' vital signs, symptoms and general condition to the appropriate individual(s).**

- **Explains common tests and procedures to patients and their families.**

- **Records on patient charts observations of patients and responses to nursing care rendered.**

- **Maintains environmental conditions conducive to the comfort and safety of patients.**

- **Assists with unit management and/or assumes charge of unit as assigned.**

- **Guides, directs and participates in the orientation of Technicians and Nurse Aides in rendering patient care.**

LANGUAGE SKILLS:

**ENGLISH:** Oral skills: discussing patient care and condition with other health care team members; explaining procedures and tests; following instructions. Reading and writing skills: report writing; filling out forms, charts.

**OTHER LANGUAGE:** Oral skills: discussing patient care and condition with other health care team members; explaining procedures and tests; following instructions.
TRAINING REQUIREMENTS:

PRIOR: Completion of a practical nursing course approved by the State board of nursing (usually 1 year, including classroom instruction, clinical practice). Educational requirements for program entrance vary by State. Successful completion of a written examination.

CONCURRENT: Currently licensed or otherwise duly authorized to practice as a Licensed Practical Nurse. Participation and attendance at continuing education programs.

TRAINING AVAILABILITY:

In 1980, over 1,200 State-approved programs were available at: trade, technical or vocational schools; community and junior colleges; local hospitals; health agencies; private educational institutions.

EARNINGS:

1980: average:

- in hospitals: $12,500 per year.
- in nursing homes: $11,400 per year.
- Federal hospitals: $8,900 per year.

ADVANCEMENT OPPORTUNITIES:

To team leader. May prepare to become a registered nurse with additional education and training. In-service training can prepare LPNs for work in specialized areas.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: REGISTERED NURSE (R.N.)

DUTIES:

- Observes, assesses and records symptoms, reactions, and programs of patients.
- Administers medications.
- Assists in patient's rehabilitation.
- Instructs patients and family members in proper health maintenance care.

Hospital Nurse:

- Provides skilled bedside nursing care, carries out the medical regimen prescribed by physicians.
- May supervise LPNs, nurse aides, orderlies.
- Usually works with groups of patients who require similar care.

Private Duty Nurse:

- Gives individual care to patients who need constant attention, in a home, hospital, or convalescent institution.

Community Health Nurse:

- Instructs patients and their families in health care.
- Gives periodic care as prescribed by a physician.
- May instruct community groups in proper diet, arrange for immunizations.
- Works with community leaders, teachers, parents, and physicians in community health education.

Office Nurse:

- Assists physicians, dental surgeons, dentists in private practice or clinics.
- May perform routine laboratory and office work.

Occupational Health Nurse (Industrial Nurse):

- Provides nursing care to employees in government and industry.
- Promotes employee health.
- Treats minor injuries and illnesses occurring at workplace, provides for the needed nursing care. Arranges for further medical care if necessary, offers health counseling.
- May assist with health examinations and inoculations.

Nurse Educator:
- Teaches students the principles and skills of nursing, in the classroom and in direct patient care.
- Conducts continuing education courses for R.N.'s, LPN's, and nursing assistants.

LANGUAGE SKILLS:

ENGLISH: Oral skills: discussing patient's condition, care with patient, family, and other members of the health care team; explaining procedures; lecturing (if an educator). Reading and writing skills: filling out medical charts; report writing.

OTHER LANGUAGE: Oral skills: explaining procedures, care of patient; instructing community groups where the patient/family/group is more comfortable speaking languages other than English.

TRAINING REQUIREMENTS:

PRIOR: High school graduation required to enter a school of nursing; Completion of a school of nursing, 2- to 5-year program; and, pass a written State Board competency examination.

CONCURRENT: Possession of a State Registered Professional Nurse License.

TRAINING AVAILABILITY:

Junior, community colleges: 2-year associate degree program; Hospitals, independent schools: 3-year diploma program; Colleges, universities: 4-5 year bachelor's degree program. Advanced Training: master's and doctoral degree programs also available.

EARNINGS:

1980 survey: average earnings:

starting:

non-Federal Hospitals: $17,000 per year.
in Nursing Homes: $14,500 per year.
for Industrial Nurs.: $17,000 per year.
in Federal Agencies: $19,960 per year.

1981 survey: average earnings:
Veterans Administration: inexperienced nurses:
a diploma or associate degree: $13,672 per year.
a bachelor's degree: $15,993 per year.

ADVANCEMENT OPPORTUNITIES:
Depends on type of training program individual has completed.
With a bachelor's degree: to supervisory or administrative positions; for jobs in public health agencies; for admission to graduate nursing programs.
With advanced degrees: for research, consulting, teaching, or a clinical specialization.
With experience from staff nurse to head nurse, assistant director of nursing, director of nursing services.

INTERNATIONAL OPPORTUNITIES:
Not applicable.
JOB TITLE: NURSE-MIDWIFE

DUTIES:

- Under medical supervision: Provides antepartum, intrapartum, postpartum and neonatal care in a municipal hospital.

  - Antepartum Care:
    a. Takes medical history.
    b. Examines patient—weight, blood pressure, breasts, abdomen, pelvis and pelvic organs.
    c. Evaluates obstetrical status with doctor and patient.
    d. Plans and provides continuing health supervision and education.

  - Intrapartum Care:
    a. Takes medical history and reviews antepartum record.
    b. Does necessary laboratory procedures.
    c. Evaluates status of labor.
    d. Plans and provides for continuous care and support.
    e. Manages labor and delivery.
    f. Provides immediate care of the newborn.

  - Postpartum Care:
    a. Makes periodic visits to mother and baby and evaluates their condition, while in hospital.
    b. Plans for and carries out postpartum examinations.
    c. Assists mother in plans for care of herself and family throughout the puerperium.

LANGUAGE SKILLS:

ENGLISH: Oral skills: taking medical history; teaching patient about home care; managing labor and delivery. Reading and writing skills: writing medical history; reviewing medical records.

OTHER LANGUAGE: Oral skills: taking medical history; teaching patient about home care; managing labor and delivery.

TRAINING REQUIREMENTS:

PRIOR: High school required for admission to school of nursing; completion of a school of nursing, 2- to 5-year program; and, pass a written State Board competency examination.
CONCURRENT: Possession of a State Registered Professional Nurse License; and, possession of a permit to practice nurse-midwifery issued by the municipal or county Commissioner of Health.

TRAINING AVAILABILITY:

For nursing degree:

Junior, community colleges: 2-year associate degree program; Hospitals, independent schools: 3-year diploma program; Colleges, universities: 4- or 5-year bachelor's degree program.

EARNINGS:

$15,995 to $19,651 per year, large urban area.

ADVANCEMENT OPPORTUNITIES:

Lateral movement to other Nursing areas; upward to supervisory positions with additional, more diversified experience.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: HEAD NURSE

DUTIES:

- Assigns, instructs and supervises activities of nursing and non-nursing personnel.
- Makes daily ward rounds.
- Attends physicians on their rounds and sees that their orders are carried out properly and promptly.
- Periodically visits patients to insure maximum care and to ascertain need for additional or modified services.
- Requisitions, distributes and supervises the use of supplies and equipment.
- Maintains and supervises records of nursing and medical treatments and related services performed by nurses.
- Supervises the maintenance of conditions of cleanliness and safety.
- Assists in planning and conducting in-service training programs for nursing personnel: gives lectures, bedside instruction and demonstrations, and leads conferences.
- In a school of nursing, serves as a teacher of student nurses, performing classroom and ward instruction, and leading conferences.
- Assists in the planning of the education programs.
- Evaluates the performance of student nurses or of subordinate personnel.
- May perform selected bedside functions.
- In the Board of Education, is responsible for nursing services in the Medical Division and supervises the nursing personnel in connection with medical examinations of candidates and employees of the Board; supervises nursing services in the First Aid Room and medical examination rooms.

LANGUAGE SKILLS:

ENGLISH: Oral skills: giving instructions, lectures, working with patients; leading conferences; supervising, instructing personnel; following physician's orders. Reading and writing skills: record keeping; preparing work schedules.
OTHER LANGUAGE: Oral skills: giving instructions, lectures; working with patients; leading conferences; supervising, instructing personnel.

TRAINING REQUIREMENTS:

PRIOR: State Registered Professional Nurse license, and six (6) months of satisfactory graduate nursing experience; or a satisfactory equivalent.

CONCURRENT: On-the-job training regarding specific duties.

TRAINING AVAILABILITY:

Private vocational or technical schools, colleges and universities.

EARNINGS:

$18,493 to $21,888 per year, large urban area.

ADVANCEMENT OPPORTUNITIES:

To supervisory positions with experience and satisfactory job performance.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
NURSING
CAREER PROGRESSION LADDER

Director of Nursing
Associate Director
Assistant Director

Nursing Instructor
Supervisor
Clinical Specialist

*Head Nurse

*Nurse - Midwife
*Registered Nurse
Staff Nurse

*Licensed Practical (Vocational) Nurse
*Primary Psychiatric Nurse
Psychiatric Nurse
Practical Nurse

Practical Nurse
Nurse's Aide

* = Job descriptions included in this chapter.
# CHAPTER XII

**OFFICE OCCUPATIONS**

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OFFICE OCCUPATIONS

Prerequisites for Bilingual Vocational Training Project Development

Job descriptions for eleven office occupations are detailed in this chapter. These include receptionists and telephone operators, clerks, typists, secretaries, office managers and collection workers.

For most of these occupations, a high school education is preferred or required by employers. This is a factor that bilingual vocational training program administrators should take into consideration when planning a program in this occupation. Literacy in native languages is an important factor in teaching English reading and writing skills to limited English speakers. Good spelling, punctuation and grammar as well as business math, typing and word processing skills are very valuable for all office occupations. Skills that can be taught in English-as-a-second language classes include answering questions, handling complaints, telephone techniques, keeping records, and taking messages.

For several of the office occupations, e.g., secretaries, specialized training is preferred. Training for office occupations is available throughout the country, and is offered by business schools, community and junior colleges; government agencies, and private companies. Bilingual vocational training programs already provide training in some of these areas, and others can be developed; a training program would probably need to be in operation for one and a half to two years to enable the trainees to master the necessary English skills. Training in stenography would not be a feasible skill to teach to limited English speakers.

For some positions, e.g., Postal Clerk, U.S. citizenship or permanent resident-alien status in the United States is required. This is another factor to be taken into account when screening and recruiting trainees.
Employment projections

Growth in clerical work or office occupations is expected to exceed the growth in all occupations by about 10 percent. Within the office occupations, the highest rates of growth are expected to occur in occupations related to insurance—claims clerk, claims examiners, insurance clerks, medical clerks. Substantial growth rates also are projected for receptionists and office machine operators. Despite modest growth rates, secretarial, typists and general office clerk occupations rank among the fastest growing occupations in terms of new jobs to be added by 1990—a total of more than 1.2 million for these three occupations combined.
# TABLE 15
## OFFICE OCCUPATIONS
### Prerequisites for Job Placement

<table>
<thead>
<tr>
<th>Job Title</th>
<th>Education</th>
<th>Training/Experience</th>
<th>Language Skills Required</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>English</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Oral</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Other Language</td>
</tr>
<tr>
<td>Office Manager</td>
<td>High School preferred</td>
<td>Experience as a supervisor.</td>
<td>Supervising support staff; analyzing, organizing office procedures.</td>
</tr>
<tr>
<td>Secretary</td>
<td>Secretarial training preferred</td>
<td></td>
<td>Scheduling appointments; supervising clerical workers; greeting callers.</td>
</tr>
<tr>
<td>Typist</td>
<td>High School</td>
<td>Operating office equipment, knowledge of office procedures are assets.</td>
<td>Answering phones; following directions; transcribing recorded dictation.</td>
</tr>
<tr>
<td>Receptionist</td>
<td>High School preferred</td>
<td>Courses in English, spelling, typing, bookkeeping, business practices useful.</td>
<td>Calling customers, patients, making appointments; telephone skills.</td>
</tr>
</tbody>
</table>

Job titles are listed in order of advancement. Further details are provided in the job descriptions for each job title. Additional job titles are included in the career progression ladder to show advancement opportunities.
Table 16
Employment in Office Occupations
Actual 1978 and Projected 1990*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL OCCUPATIONS COMBINED</td>
<td>97,610</td>
<td></td>
</tr>
<tr>
<td>CLERICAL WORKERS</td>
<td>17,820</td>
<td></td>
</tr>
<tr>
<td>File Clerks</td>
<td>251</td>
<td></td>
</tr>
<tr>
<td>General Clerks, Office</td>
<td>2,269</td>
<td></td>
</tr>
<tr>
<td>Mail Clerks</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>Order Clerks</td>
<td>240</td>
<td></td>
</tr>
<tr>
<td>Office Machine Operators</td>
<td>842</td>
<td></td>
</tr>
</tbody>
</table>

*Employment projections are based on data from the U.S. Bureau of Labor Statistics. For each industry, employment in 1978 is shown, and three series of employment projections are shown for 1990: Low (L), Medium (M), and High (H). For comparison, projections also are shown (in capital letters) for all occupations combined and for the major occupational groups of which the occupations studied are a part. The projections are explained and additional detail is provided in Appendix A.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Secretaries</td>
<td>2,319</td>
<td></td>
</tr>
<tr>
<td>Stenographers</td>
<td>262</td>
<td></td>
</tr>
<tr>
<td>Typists</td>
<td>933</td>
<td></td>
</tr>
<tr>
<td>Statistical Clerks</td>
<td>81</td>
<td></td>
</tr>
<tr>
<td>Switchboard Operators/Receptionists</td>
<td>219</td>
<td></td>
</tr>
<tr>
<td>Receptionists</td>
<td>369</td>
<td></td>
</tr>
<tr>
<td>Claim Adjusters</td>
<td>65</td>
<td></td>
</tr>
<tr>
<td>Claims Clerks</td>
<td>63</td>
<td></td>
</tr>
<tr>
<td>Claims Examiners, Insurance</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td>Insurance Clerks, Medical</td>
<td>63</td>
<td></td>
</tr>
<tr>
<td>Postal Clerks</td>
<td>310</td>
<td></td>
</tr>
<tr>
<td>Clerical Supervisors</td>
<td>402</td>
<td></td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>---------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td></td>
<td>1978</td>
<td>1990</td>
</tr>
<tr>
<td>CLERICAL WORKERS</td>
<td>17,820</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Telephone Operators (including switchboard,</td>
<td>312</td>
<td></td>
</tr>
<tr>
<td>Central Office, directory assistance)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
OFFICE OCCUPATIONS
LISTING OF CORPORATIONS/ORGANIZATIONS

DATA SOURCES

- Bay Area Rapid Transit, CA
- Citibank, NY
- Chinatown Planning Council, NY
- D.C. Department of Recreation
- Fairfax Hospital, VA
- Gouverneur Hospital, NY
- Guide Service of Washington
- Hyatt Regency Hotel, Washington, D.C.
- Marriott Corporation, Washington, D.C.
- Riggs National Bank, Washington, D.C.
- San Franciscan Hotel, CA
- Sears, Roebuck and Company, Washington, D.C.
- SINO Broadcast, NY
- Solar International Shipping Agency, NY
- Travelers Aid Society, CA
- U.S. Postal Service, Washington, D.C.
- Waldorf - Astoria Hotel, NY

ADDITIONAL INFORMATION

- Directory of private business schools:
  - Association of Independent Colleges and Schools
    1730 M Street, N.W.
    Suite 600
    Washington, D.C. 20036

- Available positions in credit collection offices:
  - American Collectors Association
    4040 W. 70th Street
    Minneapolis, MN 55435

- Secretary:
  -- Career information:
  - Professional Secretaries International
    2440 Pershing Road
    Suite G10
    Kansas City, MO 64108

- Telephone (PBX) Operator:
  -- General information:
  - International Brotherhood of Electrical Workers
    1125 15th Street, N.W.
    Washington, D.C. 20005
-Telecommunications International Union  
P.O. Box 5426  
Hamden, CT 06518

-United States Independent Telephone Association  
1801 K Street, N.W., Suite 1201  
Washington, D.C. 20006

**CORPORATION/AGENCY LISTING JOB OPPORTUNITIES**

<table>
<thead>
<tr>
<th>Corporation/Agency</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Towne International</td>
<td>New York, NY</td>
</tr>
<tr>
<td>Fortin Laminating Corporation</td>
<td>Los Angeles, CA</td>
</tr>
<tr>
<td>Kaiser Permanente Medical Center</td>
<td>Los Angeles, CA</td>
</tr>
<tr>
<td>Toyota America, Inc.</td>
<td>Los Angeles, CA</td>
</tr>
<tr>
<td>Easton Aluminium</td>
<td>Los Angeles, CA</td>
</tr>
<tr>
<td>National Technical Schools</td>
<td>Los Angeles, CA</td>
</tr>
<tr>
<td>Word Algebra</td>
<td>Chicago, IL</td>
</tr>
<tr>
<td>Washington Mgmt. and Development Corporation</td>
<td>McLean, VA</td>
</tr>
<tr>
<td>Larousse</td>
<td>New York, NY</td>
</tr>
<tr>
<td>Aetna Life and Casualty</td>
<td>New York, NY</td>
</tr>
<tr>
<td>Advertisers Shipping Company, Inc.</td>
<td>New York, NY</td>
</tr>
<tr>
<td>ISO Insurance Company</td>
<td>New York, NY</td>
</tr>
<tr>
<td>Office</td>
<td>New York/Chicago</td>
</tr>
<tr>
<td>Manufacturing firm</td>
<td>Los Angeles/Washington, D.C.</td>
</tr>
<tr>
<td>Law office</td>
<td>Los Angeles/Washington, D.C.</td>
</tr>
<tr>
<td>Dental office</td>
<td>Los Angeles, CA</td>
</tr>
<tr>
<td>Transportation Company</td>
<td>New York, NY</td>
</tr>
<tr>
<td>Pattern Company</td>
<td>Washington, D.C.</td>
</tr>
<tr>
<td>International office</td>
<td>Washington, D.C.</td>
</tr>
<tr>
<td>Accounting office</td>
<td>Washington, D.C.</td>
</tr>
<tr>
<td>Gourmet food importer</td>
<td>Washington, D.C.</td>
</tr>
<tr>
<td>Consulting firm</td>
<td>Washington, D.C.</td>
</tr>
<tr>
<td>Advertising firm</td>
<td>Washington, D.C.</td>
</tr>
</tbody>
</table>

**Bilingual Employment Agencies**

<table>
<thead>
<tr>
<th>Agency</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bilanz/Montas Agency</td>
<td>New York, NY</td>
</tr>
<tr>
<td>Hanover Bilingual Specialists</td>
<td>New York, NY</td>
</tr>
<tr>
<td>Chess Employment Agency</td>
<td>New York, NY</td>
</tr>
<tr>
<td>Dover Agency</td>
<td>New York, NY</td>
</tr>
<tr>
<td>Donnelly</td>
<td>New York, NY</td>
</tr>
<tr>
<td>Wenniar Agency</td>
<td>New York, NY</td>
</tr>
<tr>
<td>Irene Cohen Agency</td>
<td>New York, NY</td>
</tr>
<tr>
<td>Virginia Employment Commission</td>
<td>Falls Church, VA</td>
</tr>
<tr>
<td>Interlangue Bilingual Specialists</td>
<td>New York, NY</td>
</tr>
<tr>
<td>Bilingual Agency</td>
<td>New York, NY</td>
</tr>
<tr>
<td>Cernie Kassasa, Inc.</td>
<td>New York, NY</td>
</tr>
<tr>
<td>Kon nec Agency</td>
<td>New York, NY</td>
</tr>
<tr>
<td>Hunt Bilingual Specialist</td>
<td>New York, NY</td>
</tr>
<tr>
<td>D. Stamber Associates</td>
<td>New York, NY</td>
</tr>
<tr>
<td>Essex Bilingual Division</td>
<td>New York, NY</td>
</tr>
<tr>
<td>Iva Cowan ASA Inc.</td>
<td>New York, NY</td>
</tr>
</tbody>
</table>
- Kent
- Parker Finch
- Drum
- Unique
- Winston
- The Hamilton System Agency
- Brent Temps
- Princeton Agency
- Kling Agency
- ADIA Temporary Services

New York, NY
New York, NY
New York, NY
New York, NY
New York, NY
New York, NY
New York, NY
New York, NY
New York, NY
New York, NY
JOB TITLE: FILE CLERK

DUTIES:

- Files correspondence, cards, invoices, receipts and other records in alphabetical or numerical order, or by subject matter.
- Reads incoming materials and sorts according to file system.
- Locates and removes material from files when requested.
- Keeps records of material removed, stamps material received, traces missing file folders and types indexing information on folders.
- Destroys outdated materials or transfers to inactive storage.
- Retrieves documents, microfilm spools, and places them in an electronic transmitter that displays information on video terminals.

LANGUAGE SKILLS:

ENGLISH: Oral skills: responding to requests; following instructions. Reading and writing skills: record keeping; sorting files; reading incoming materials.

OTHER LANGUAGE: Oral skills: responding to requests; following instructions.

TRAINING REQUIREMENTS:

PRIOR: High school, typing and some knowledge of office work preferred.

CONCURRENT: On-the-job training in each organization to learn filing system and office procedures. Training to learn how to operate mechanical filing systems. Approximately 2-3 weeks.

TRAINING AVAILABILITY:

In-house. Business education programs, State and local training programs.

EARNINGS:

1978 in urban areas:

beginning: $6,600 per year.

experienced: $8,000 to $10,000 per year.
1979:

Federal Government:
No high school, beginning: $6,552 per year.
High school graduates: $7,400 per year.
experienced: $9,700 per year.

ADVANCEMENT OPPORTUNITIES:
Advance to supervisory position. After some experience and more training can be promoted to typists, receptionists or office machine operators.

INTERNATIONAL OPPORTUNITIES:
Not applicable.
JOB TITLE: TELEPHONE OPERATOR (PBX OPERATOR)

DUTIES:

- Receives and relays all incoming calls; gives directory assistance; completes the call, makes necessary connections and records details for billing.
- May place outgoing toll calls.
- Looks up and provides telephone numbers.
- Operates switchboard and transfers calls.
- Performs incidental clerical work, if time permits.

LANGUAGE SKILLS:

ENGLISH: Oral skills: telephone skills; providing assistance; responding to questions. Reading and writing skills: directories; message taking.

OTHER LANGUAGE: Oral skills: telephone skills: providing assistance; responding to questions.

TRAINING REQUIREMENTS:

PRIOR: High school courses in speech, office practices and business math helpful.

CONCURRENT: On-the-job training, 1 to 3 weeks.

TRAINING AVAILABILITY:

Further instruction provided by supervisor.

EARNINGS:

1980:

beginning: $10,733 per year.
experienced: $15,040 per year.

1980:

Federal government:

beginning: $8,951 per year.
ADVANCEMENT OPPORTUNITIES:

With experience can be promoted to supervisory jobs or clerical occupations, telephone installers and repairers. In small businesses, opportunities are limited.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
Job Title: Receptionist

DUTIES:

- Greets customers and other visitors, determines their needs, and refers caller to person who can help.
- Keeps records of callers and distributes messages.
- Files, types, operates switchboard.
- Opens and sorts mail.
- May include, depending on type of business or office:
  - Preparing travel vouchers and simple bookkeeping.
  - Calling customers to notify them of arrival of product.
  - Obtaining personal and financial information and directing patients to proper waiting rooms.
  - Administering employment application tests.
  - Arranging appointments.

LANGUAGE SKILLS:

ENGLISH: Oral skills: arranging appointments; greeting clients, customers; providing information, assistance; operating switchboard; may administer tests. Reading and writing skills: keeping records; preparing travel vouchers.

OTHER LANGUAGE: Oral skills: arranging appointments; greeting clients, customers; providing information, assistance; operating switchboard.

TRAINING REQUIREMENTS:

PRIOR: High school usually required or preferred. No experience necessary. Courses in English, spelling typing, bookkeeping and business practices useful. College or business school helpful for advancement.

CONCURRENT: On-the-job training at most companies, organizations.

TRAINING AVAILABILITY:

Many companies have own training programs to learn skills needed for advancement.
EARNINGS:

1980: Private sector:

Urban areas: $9,500 per year.
Western U.S: $10,300 per year.
Southern U.S.: $9,204 per year.

1982: Federal Government:

beginning: $8,300 per year.
average: $11,500 per year.

ADVANCEMENT OPPORTUNITIES:

Large offices offer advancement to secretary, administrative assistant, bookkeeper.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: TYPIST

DUTIES:

- Types headings on form letters, copies directly from handwritten drafts and addresses envelopes.
- Answers telephones, files, and operates office machines (copiers and calculators).
- Plans and types complicated statistical tables, combines and rearranges materials from different sources.
- Prepares master copies to be reproduced on copying machines.
- May transcribe recorded dictation.

Clerk Typist:

- Combines typing with filing, sorting mail, answering telephones.
- Sets up simple standard tabulation.
- Categorizes files.

LANGUAGE SKILLS:

ENGLISH: Oral skills: following instructions; answering phones. Reading and writing skills: good spelling, punctuation and grammar; categorizing files.

OTHER LANGUAGE: Oral skills: answering phones. Typing in a language other than English may be required for organizations printing or publishing in that language.

TRAINING REQUIREMENTS:

PRIOR: High school needed. Ability to operate office equipment and knowledge of office procedures are assets. A specific speed of 50-60 words per minute or more is often required.

CONCURRENT: On-the-job training at many agencies and organizations.

TRAINING AVAILABILITY:

Some companies and governmental organizations. Many States sponsor programs to train unemployed and low-skilled workers for entry jobs. Vocational or technical schools, secondary schools, private business schools.
EARNINGS:

1980:

Private sector: average:

Typist: $8,996 to $10,192 per year.
Clerk Typist: $9,568 per year.
Statistical Typist: $10,192 per year.

1981:

Federal Government:

starting: $8,951 to $10,963 per year, depending on education, training and experience.

ADVANCEMENT OPPORTUNITIES:

Higher level typing jobs, secretary, supervisory positions.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: BOOKKEEPER

DUTIES:

- Maintains systematic and up-to-date records of accounts and business transactions in journals, ledgers, and other accounting forms.
- Prepares periodic financial statements showing money received and paid out.

General bookkeeper (small firms):

- Handles all the bookkeeping.
- Analyzes and records all financial transactions, verifies and enters details of transactions from sales slips, invoices, check stubs, inventory records, requisitions.
- Summarizes details on separate ledgers, using adding or calculating machine; transfers data to general ledger.
- Balances books, calculates the firm's payroll and makes up employees' paychecks.
- Compiles reports to show statistics, such as cash receipts and expenditures, accounts payable and receivable, profit and loss, etc.
- Prepares and mails customers' bills and answers the telephone.

Bookkeeping Clerk (entry level):

- Records business transactions, payroll deductions, bills paid and due.
- Types vouchers, invoices and other financial records.

LANGUAGE SKILLS:

ENGLISH: Oral skills: answering phone; responding to inquiries from customers, employees. Reading and writing skills: record keeping, report preparation, balancing books, mailing bills.

OTHER LANGUAGE: Oral skills: answering phone; responding to inquiries from customers, employees.

TRAINING REQUIREMENTS:

PRIOR: High school or equivalent. Bookkeeping, principles of accounting and business arithmetic required. Sometimes business courses are preferred, also 2 to 3 years experience for non-entry level positions. Typing useful. Using business machines.
CONCURRENT: Sometimes work-study programs are arranged by high schools and local businesses.

TRAINING AVAILABILITY:
High schools, community and junior colleges, business schools, and colleges.

EARNINGS:
1981: Private sector: average:
beginning: $ 9,575 per year.
experienced: $11,431 to $13,454 per year.

Federal-Government:
beginning: $8,951 per year.
experienced: $9,766 per year.

ADVANCEMENT OPPORTUNITIES:
To supervisory positions. With proper college accounting degree, to accountant.

INTERNATIONAL OPPORTUNITIES:
Not applicable.
JOB TITLE: SECRETARY

DUTIES:

- Schedules appointments; deals with callers; types and takes shorthand.
- Relieves employers of routine duties.
- Reads and routes incoming mail.
- Composes and types routine correspondence.
- May record minutes of staff meetings.
- May oversee clerical workers, keep personnel records.
- Assists in compiling periodic reports; assembles data from files.

**Legal Secretary**: 

- Prepares legal papers and correspondence of legal nature, such as summonses, complaints, motions, and subpoenas.
- Reviews law journals, legal publications.
- Assists with legal research.

**Medical Secretary**: 

- Compiles and records medical records, charts and correspondence.
- May prepare and send bills to patients and record appointments.

**Technical Secretary**: 

- Assists engineers or scientists.
- Maintains technical library.
- Gathers and edits materials for scientific papers.

**Social Secretary**: 

- Coordinates social, business and personal affairs of employer.
- Reads and answers correspondence.
- Keeps employer informed about all social activities.
LANGUAGE SKILLS:

ENGLISH: Oral skills: scheduling appointments; telephone skills; greeting and helping clients, customers. Reading and writing skills: report writing; letter writing; filling out forms, charts; good spelling, vocabulary, grammar.

OTHER LANGUAGE: Oral skills: scheduling appointments; telephone skills; greeting and helping clients, customers. Reading and writing skills: letter writing; translating may be required.

TRAINING REQUIREMENTS:

PRIOR: High school required. Additional secretarial training preferred.

CONCURRENT: On-the-job training.

TRAINING AVAILABILITY:

Many private firms and government agencies have their own training facilities to upgrade skills. Many State and local government agencies sponsor programs to train the unemployed. Private business schools, vocational or technical schools.

EARNINGS:

1980:

Federal government:

beginning: $9,776 to $15,193 per year.

1981:

Secretary to supervisors in small offices: $12,947 per year.

Secretary to officers in small companies: $13,769 per year.

Secretary to middle management in large companies: $9,776 per year.

Executive secretaries: $16,872 per year.

ADVANCEMENT OPPORTUNITIES:

To administrative assistant, office manager, executive secretary, management positions, an extensive knowledge of employer's operations. To translator, researcher in certain firms.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: STENOGRAPHER

DUTIES:

- Takes dictation and transcribes own notes on a typewriter.
- Takes shorthand or uses stenotype machine.
- Takes routine dictation.
- Performs general office tasks, such as typing, filing, answering telephones and operating office machines.
- Sits in on staff meetings and gives summary report or word-for-word record.
- May supervise other stenographers, typists and clerical workers.
- May take dictation in technical terms, e.g., medical, legal, engineering or scientific.

LANGUAGE SKILLS:

ENGLISH: Oral skills: telephone skills; giving reports; supervising other workers; taking dictation. Reading and writing skills: taking dictation; writing reports or word-for-word records.

OTHER LANGUAGE: Oral skills: telephone skills; supervising other workers. May take dictation in languages other than English.

TRAINING REQUIREMENTS:

PRIOR: High school required. Additional secretarial training preferred. Sometimes speed and accuracy are considered first (minimum, Federal Government—80 words per minute).

CONCURRENT: On-the-job training.

TRAINING AVAILABILITY:

Many private firms and government agencies have their own training facilities to upgrade skills. Colleges, private business schools.

EARNINGS:

1981:

General stenographers: $13,191 per year.
Experienced, highly skilled: $15,727 per year.
1981:

Federal Government:

Beginning: $9,766 to $12,266 per year.

ADVANCEMENT OPPORTUNITIES:

When skills are improved, to secretarial jobs, administrative assistant, office manager. Through additional training, shorthand reporter. Knowledge of languages other than English helpful for advancement to secretarial and supervisory positions.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: COLLECTION WORKER

DUTIES:

- Persuades people to pay their unpaid bills.
- Contacts debtor by phone or mail.
- Works out new payment schedules.
- Advises customers with financial problems.
- Contacts customers to determine if they are satisfied with the way their accounts are being handled.
- Locates and returns goods, such as automobiles and furniture which have not been paid for.

LANGUAGE SKILLS:

ENGLISH: Oral skills: advising customers in person, on the phone; persuading customers to pay their bills. Reading and writing skills: letter writing, record keeping, report preparation.

OTHER LANGUAGE: Oral skills: advising customers in person, on the phone; persuading customers to pay their bills. Reading and writing skills: letter writing to contact customers on occasion.

TRAINING REQUIREMENTS:

PRIOR: High school education. Courses in psychology and speech useful.

CONCURRENT: On-the-job training, conducted by a supervisory employee or experienced worker.

TRAINING AVAILABILITY:

American Collectors Association offers special seminars. In-house: Retail stores, finance companies, banks.

EARNINGS:

1980: average earnings:

beginning: $9,000 per year.

experienced: $12,000 to $15,000 per year.
ADVANCEMENT OPPORTUNITIES:

With above-average abilities may become collection managers or supervise a staff of collectors. Could also progress to credit authorizer, bank loan officer or credit manager.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: POSTAL CLERK

DUTIES:

- Sells stamps, money orders; accepts parcel post; registers and insures mail.
- Sorts incoming and outgoing mail. Weighs parcels and letters to determine postage.
- Examines mail for correct postage and cancels mail.
- Receives complaints concerning mail delivery, mail theft and lost mail.
- Answers questions pertaining to mail regulations or procedures.
- Places mail into pigeonholes of mail rack or into bags according to state, address, name of person or organization.

LANGUAGE SKILLS:

ENGLISH: Oral skills: selling to customers; providing information and assistance; answering questions; handling complaints. Reading and writing skills: sorting mail, reading labels.

OTHER LANGUAGE: Oral skills: selling to customers; providing information and assistance; answering questions; handling complaints.

TRAINING REQUIREMENTS:

PRIOR: High school or equivalent needed. Completion of a written exam.

CONCURRENT: Must be a U.S. citizen. On-the-job training.

TRAINING AVAILABILITY:

Some classroom instruction offered in-house.

EARNINGS:

1980: average:

Full time: $18,282 to $20,944 per year.
Part-time: $9.05/hour to $10.38/hour.
ADVANCEMENT OPPORTUNITIES:

Begin as part-time flexible employee and become full-time worker as vacancies occur. May bid for non-supervisory positions as expeditor or window service technician. Could become supervisors.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: CLAIM REPRESENTATIVE (CLAIM ADJUSTER/EXAMINER)

DUTIES:

- Investigates claims, negotiates settlement with policyholders and authorizes payment.
- Determines whether the policy covers the claim and the amount of the loss.
- Submits their findings.
- Contacts claimants by phone or mail and has the policyholder send repair costs, medical bills and other statements.
- Keeps written or taped records of information.
- Investigates questionable claims or those exceeding the specified amount.

LANGUAGE SKILLS:

ENGLISH: Oral skills: interviewing a wide variety of people; telephone skills. Reading and writing skills: writing findings of investigations, letters to claimants; record keeping.

OTHER LANGUAGE: Oral skills: interviewing a wide variety of people; telephone skills.

TRAINING REQUIREMENTS:

PRIOR: College preferred but not required if applicant has specialized experience.

CONCURRENT: On-the-job training and home study courses (in some large companies).

TRAINING AVAILABILITY:

The Insurance Institute of America offers a six-semester study program leading to an associate degree. Claims education programs also offered.

EARNINGS:

1980: average earnings.

Claim adjuster: $15,000 per year.
Claim examiner: $16,000 per year.
Claim supervisor: $21,000 per year.
ADVANCEMENT OPPORTUNITIES:

Applicants with 2 or more years of college advance faster. Those who show unusual competence in claims work or outstanding administrative skills may be promoted to department supervisor in a field office or to a managerial position in the home office. Can transfer to underwriting or sales.

INTERNATIONAL OPPORTUNITIES:

Some cases may require travel outside the United States.
JOB TITLE: OFFICE MANAGER

DUTIES:

- Supervises maintenance of office and its equipment.
- Analyzes and organizes office operations and procedures.
- Evaluates office production; revises procedures.
- Establishes uniform correspondence procedures.
- Receipts all income, reviews bills for accuracy and accountability, reconciles petty cash expenditures, maintains proper records.
- Formulates procedures for systematic retention, protection, retrieval, transfer and disposal of records.
- Plans office layouts. Initiates cost reduction programs.
- Supervises support staff, i.e., clerks, typists, secretaries; reviews clerical and personnel records.
- Prepares employee ratings and conducts employee benefit and insurance programs.
- Coordinates activities of various clerical departments or workers within departments.

LANGUAGE SKILLS:

ENGLISH: Oral skills: supervising support staff; coordinating all departments; working with managers; reporting at staff meetings. Reading and writing skills: record keeping; report writing; formulating procedures.

OTHER LANGUAGE: Oral skills: supervising support staff; working with other department managers.

TRAINING REQUIREMENTS:

PRIOR: High school preferred. Experience in a supervisory capacity.

CONCURRENT: On-the-job training regarding company's policies, procedures, operations.

TRAINING AVAILABILITY:

Private business schools, vocational or technical schools for beginning training. Work experience acquired at various employers.
EARNINGS:

$15,000 to $22,000 per year, large urban area.

ADVANCEMENT OPPORTUNITIES:

With additional training and experience, lateral transfers within a large organization. This is usually the highest level position.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
* Office Manager

Manager, Word Processing Unit

Lead Word Processing Operator

Lead Executive Secretary

Senior Secretary

* Secretary

Senior Clerk

* Typist

* Telephone (PBX) - Receptionist - Clerk - Typist - File Clerk - Data Entry Operator

Lead Data Entry Operator

Senior Data Entry Operator

Computer Operator

Junior Computer Operator

Senior Computer Operator

Lead Computer Operator

Office Manager

Senior Exec. Secretary

Executive Secretary

Secretary

Legal Executive Secretary

Senior Executive Secretary

Word Processing Operator

Senior Secretary
# CHAPTER XIII

## PROTECTIVE SERVICES/CORRECTION OCCUPATIONS

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Prerequisites for Bilingual Vocational Training Project Development

Nine job descriptions are presented in this chapter. They are:

- Police Dispatcher (Police Administrative Aide);
- Guard;
- Firefighter;
- Police Officer;
- State Police Officer;
- Community Affairs Officer;
- Detective;
- Correction Officer; and,
- Correctional Sergeant.

For all of the protective services/correction occupations, a high school education or the equivalent is usually preferred. Some training program applicants would have to be screened out of the training program or referred to another program providing General Education Diploma (GED) courses. It is also necessary for trainees to be U.S. citizens for some of the positions, e.g., Police Officer and State Police Officer, another factor to be considered when recruiting trainees.

Representatives of the public agencies interviewed discussed a strong need for officers from minority groups, and the intensive recruiting efforts made. Bilingual vocational trainees are a potential labor pool that could be taught basic skills, including test-taking skills, enabling them to qualify for positions in the Police and Corrections Departments and enter into the training academies. The need for officers from Spanish and Chinese communities should be emphasized to potential trainees. Their native language skills would be needed on the job, especially as a community affairs officer and detective.

English language skills to be stressed include obtaining information from people in a crisis situation, following instructions, working with groups to solve problems, recordkeeping, report writing (emphasize good grammar and spelling), taking complete and accurate messages, and following directions.
Training is available for these occupations in universities and colleges, police, fire and corrections department training academies. Courses in law enforcement and criminal justice are most valuable.

Employment projections

All protective service occupations are projected to experience employment growth to 1990 above the average of all occupations. The rate of employment growth for correction officials and jailers (a 60.3 percent increase on the low-trend projection) ranks 11th out of 340 occupations.
<table>
<thead>
<tr>
<th>Job Title</th>
<th>Education</th>
<th>Training/Experience</th>
<th>Language Skills Required</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>English</td>
</tr>
<tr>
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<td></td>
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<td>Oral</td>
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<td></td>
<td></td>
<td>Other Language</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Oral</td>
</tr>
<tr>
<td>Correctional Sergeant</td>
<td>Experience as a correction officer and additional training.</td>
<td>Supervising correction officers; working with inmates.</td>
<td>Report writing; work schedules; recordkeeping.</td>
</tr>
<tr>
<td>Correction Officer</td>
<td>High school or equivalent AND / OR work experience in correction or police work.</td>
<td>Helping inmates with problems; overseeing work assignments; supervising inmates.</td>
<td>Recordkeeping.</td>
</tr>
<tr>
<td>Detective</td>
<td>Experience as a Police Officer AND recommendation as a good arresting officer.</td>
<td>Questioning witnesses; arresting criminals; testifying in court.</td>
<td>Preparing cases for court; investigating crimes.</td>
</tr>
<tr>
<td>Community Affairs Officer</td>
<td>High school usually OR 1-2 yrs. college preferred.</td>
<td>Experience in a related field AND experience as a police officer AND completion of a competitive exam.</td>
<td>Obtaining feedback from a community; solving problems.</td>
</tr>
<tr>
<td>Police Officer</td>
<td>High school sometimes required. Some college may be required.</td>
<td>Completion of a competitive exam.</td>
<td>Obtaining information; helping people in a crisis situation; arresting individuals; testify in court.</td>
</tr>
<tr>
<td>Police Dispatcher</td>
<td>High school or equivalent OR 10 years of schooling AND 2 years of experience.</td>
<td>Obtaining information on the phone in a crisis situation; following directions; good pronunciation; articulation.</td>
<td>Obtaining information on the phone in a crisis situation; good pronunciation articulation.</td>
</tr>
</tbody>
</table>

Job titles are listed in order of advancement. Further details are provided in the job descriptions for each job title. The Protective Services career progression ladder shows promotion through the ranks for police officers and fire fighters. The Correction career progression ladder includes additional job titles to show advancement opportunities.
Table 18

Employment in Protective Services/Corrections Occupations
Actual 1978 and Projected 1990*

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td></td>
<td>1978</td>
<td>1990</td>
</tr>
<tr>
<td>ALL OCCUPATIONS COMBINED</td>
<td>97,610</td>
<td></td>
</tr>
<tr>
<td>SERVICE WORKERS</td>
<td>14,414</td>
<td></td>
</tr>
<tr>
<td>PROTECTIVE SERVICE WORKERS</td>
<td>1,586</td>
<td></td>
</tr>
<tr>
<td>Police Patrolmen/Women</td>
<td>358</td>
<td></td>
</tr>
<tr>
<td>Police Officers</td>
<td>94</td>
<td></td>
</tr>
<tr>
<td>Police Detectives</td>
<td>59</td>
<td></td>
</tr>
<tr>
<td>Guards and Doorkeepers</td>
<td>591</td>
<td></td>
</tr>
</tbody>
</table>

*Employment projections are based on data from the U.S. Bureau of Labor Statistics. For each industry, employment in 1978 is shown, and three series of employment projections are shown for 1990: Low (L), Medium (M) and High (H). For comparison, projections also are shown (in capital letters) for all occupations combined and for the major occupational groups of which the occupations studied are a part. The projections are explained and additional detail is provided in Appendix A.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Correction Officials and Jailers</td>
<td>95</td>
<td>152</td>
</tr>
<tr>
<td>Firefighters</td>
<td>200</td>
<td>256</td>
</tr>
<tr>
<td>Fire Officers</td>
<td>46</td>
<td>59</td>
</tr>
</tbody>
</table>
PROTECTIVE SERVICES/CORRECTION OCCUPATIONS
LISTING OF CORPORATIONS/ORGANIZATIONS

DATA SOURCES

- California State Department of Corrections
- Montgomery County Fire and Rescue Services, MD
- New York Police Department

ADDITIONAL INFORMATION

- Corrections:
  --The American Correctional Association
  4321 Hartwick Road
  College Park, MD 20740

  --Career information, schools with criminal justice education courses, job listings:

  -Contact, Inc.
  P.O. Box 81826
  Lincoln, NE 68501

- Police Officer:
  --Entrance requirements:

  -Local civil service commissions
  -Police departments

- Firefighter:
  --Career information:

  -International Association of Chiefs
  1329 18th Street, N.W.
  Washington, D.C. 20036

  -International Association of Firefighters
  1750 New York Avenue, N.W.
  Washington, D.C. 20006

  --Professional qualifications:

  -National Fire Protection Association
  Batterymarch Park
  Quincy, MA 02269
CORPORATION/AGENCY LISTING JOB OPPORTUNITIES

- City of El Monte
- Food Chain
- Private Investigators

LOCATION

El Monte, CA
Los Angeles, CA
Washington, D.C.
JOB TITLE: POLICE DISPATCHER (POLICE ADMINISTRATIVE AIDE)

DUTIES:

- Receives and evaluates initial telephone calls regarding crimes or requests for information or services and takes appropriate action; determines the priority of service needs and requests and acts accordingly.

- Maintains daily logs of cases reported and action taken.

- Coordinates telephone calls, both in-coming and out-going, sending and receiving radio transmissions while monitoring other radio traffic, closed circuit TVs, and alarm boards.

- Operates computer terminal, teletype, and other related equipment; extracts or updates available data for these and manual file or record systems; upon request, systematically searches data banks for a variety of information including but not limited to files on persons and vehicles, stolen property, etc.

- Maintains arrest warrant files, making inquiry searches of same, and sends confirmation of such warrants at the request of other agencies.

- Coordinates and controls movements of officers in the field, especially on calls where information may be developing from moment to moment.

- Makes calls for field units which may include calls for fire suppression, ambulance, or tow truck services.

- Maintains a current file of resource telephone numbers; maintains a file of reference documents or manuals, a reverse phone directory, maps, etc. Types daily offense log.

- Follows oral and written directions; may use standard office equipment including typewriter; completes equipment or service reports as required.

LANGUAGE SKILLS:

ENGLISH: Oral skills: expressing oneself in a clear and concise manner, obtaining critical information from excited or hysterical callers quickly and efficiently; good pronunciation, articulation; listening to and understanding different speech patterns and accents; following instructions. Reading and writing skills: following instructions; keeping daily logs of cases; maintaining files; using manuals as a reference.
OTHER LANGUAGE: Oral skills: obtaining information from caller; understanding different speech patterns, accents.

TRAINING REQUIREMENTS:

PRIOR: High school or equivalent or additional directly related experience may be substituted on a year-for-year basis for the education up to a maximum of two years. Five years of experience in a related field, 2 years of which must have included emergency radio dispatching of a police or similar nature. Knowledge of clerical procedures.

CONCURRENT: On-the-job training.

TRAINING AVAILABILITY:

Fire Departments. Police departments—municipal, State.

EARNINGS:

$10,000 to $15,000 per year, urban area.

ADVANCEMENT OPPORTUNITIES:

Limited. To other clerical positions in police department, transportation authority.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: GUARD

DUTIES:

- Guards patrol and inspects property to protect it against fire, theft, vandalism and illegal entry.

  In office buildings, banks, hospitals and department stores:

- Protects records, merchandise, money and equipment.

  Ports and railroads:

- Insures that nothing is stolen while being loaded and unloaded, watches for fires, prowlers, and trouble among work crews.

  Museums and art galleries:

- Protects paintings or exhibits from fire, theft or damage.

- Answers routine questions from visitors.

  Large factories, aircraft plants and defense installations:

- Checks credentials of persons and vehicles entering and leaving the premises.

LANGUAGE SKILLS:

ENGLISH: Oral skills: conversing with visitors, employees; answering routine questions. Reading and writing skills: checking visitors, employee's credentials; writing reports.

OTHER LANGUAGE: Oral skills: conversing with visitors, employees; answering routine questions.

TRAINING REQUIREMENTS:

PRIOR: High school preferred. Some experience in the military police or in State or local police departments. In Federal government, applicants must be veterans, have some experience and pass a written examination.

CONCURRENT: Several weeks on-the-job training.
TRAINING AVAILABILITY:

Many employers give on-the-job training on the use of firearms, administering first aid, handling emergencies, operating alarm systems and electronic security equipment.

EARNINGS:

1980: average, urban areas: $8,800 per year.

Those working in North Central States earned more than the average, while those in the South earned less. In manufacturing, earnings were $14,645 per year; public utilities--$15,121 per year; banking, finance, insurance and real estate--$11,190 per year; wholesale trade--$10,795 per year; retail trade--$10,000 per year; service industries--$7,200 per year.

1979: Federal government:

Average: $13,973 per year.
Beginning: $9,766 to $10,963 per year.

ADVANCEMENT OPPORTUNITIES:

Limited opportunities. Guards with experience can transfer to police jobs. Those with some college education may advance to administrative duties or the prevention of espionage and sabotage.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: FIREFIGHTER

DUTIES:

- Responds to fire alarms and other emergency calls.
- Selects hose nozzle, depending on type of fire and directs stream of water or chemicals onto fire.
- Positions and climbs ladders to gain access to upper level of buildings or to assist individuals from burning structures.
- Creates openings in buildings for ventilation or entrance, using ax, chisel, crowbar, electric saw, core cutter and other power equipment.
- Protects property from water and smoke by use of waterproof salvage covers, smoke ejectors and deodorants.
- Administers first aid and artificial respiration to injured person and those overcome by fire and smoke.
- Inspects buildings for fire hazards and compliance with fire prevention ordinances.
- Educates the public about fire prevention and safety measures.
- Performs assigned duties in maintaining apparatus, quarters, buildings, equipment, grounds and hydrants.

LANGUAGE SKILLS:

ENGLISH: Oral skills: assisting in an emergency; administering first aid; educating the public. Reading and writing skills: building inspection; educating the public; preparing materials.

OTHER LANGUAGE: Oral skills: assisting in an emergency; administering first aid; educating the public.

TRAINING REQUIREMENTS:

PRIOR: High school or equivalent. Military service experience useful. In some locales, need to have emergency medical services training.

CONCURRENT: On-the-job training under supervision of experienced firefighters and formal and technical instruction.
TRAINING AVAILABILITY:

Beginners in large fire departments are trained for several weeks at the city's fire school. Some fire departments have accredited apprenticeship programs lasting 3 to 4 years.

EARNINGS:

1980:

beginning full-time: $13,100 to $16,100 per year.
maximum: $16,400 to $20,500 per year.

Lower in the South and higher in the West.

ADVANCEMENT OPPORTUNITIES:

After 3 to 5 years of service, become eligible for promotion to lieutenant. Further promotion usually is to captain, battalion chief, assistant chief, deputy chief, and finally, to chief. Advancement opportunities are determined by the score on written examinations, supervisor's rating and seniority.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: POLICE OFFICER

DUTIES:

- Familiarizes self with beat and with persons living in area; services community members with problems, e.g., family dispute, burglary.
- Notes suspicious persons and establishments and reports to supervisors.
- Reports hazards.
- Prepares reports about activities.
- Disperses unruly crowds at public gatherings.
- Renders first aid at accidents and investigates causes and results of accidents.
- Directs and reroutes traffic around fire or other disruption.
- Issues tickets to traffic violators.
- May be asked to testify in court.
- Warns or arrests persons violating animal ordinances.
- In a large department, assigned to a specific type of duty, e.g., patrol duty, accident prevention, operation of communication systems, criminal investigation.

LANGUAGE SKILLS:

ENGLISH: Oral skills: issuing tickets; making arrests; providing assistance and information to the public; directing traffic; testifying in court. Reading and writing skills: report preparation; writing tickets.

OTHER LANGUAGE: Oral skills: issuing tickets; making arrests; providing assistance and information to the public.

TRAINING REQUIREMENTS:

PRIOR: High school may be required. Some cities require some college training and some hire law enforcement students as police interns. Completion of a written, competitive examination.

TRAINING AVAILABILITY:
Training provided in large city police department is formal and includes classroom instruction in constitutional law and civil rights, in State laws and local ordinances, and in accident investigation, patrol, and traffic control.

EARNINGS:

1980:

beginning:
in smaller communities: $13,000 per year.
in major cities: $16,500 per year.
maximum: $19,000 to $20,000 per year.

ADVANCEMENT OPPORTUNITIES:
To detective, based on merit and performance. Promotion to sergeant, lieutenant, captain depending on examinations and on-the-job performance.

INTERNATIONAL OPPORTUNITIES:
Not applicable.
JOB TITLE: STATE POLICE OFFICER

DUTIES:

- Patrols highways and enforces laws.
- Issues traffic tickets to motorists who violate the law.
- At the scene of an accident, directs traffic, gives first aid, calls for emergency equipment and writes reports to be used in determining the cause of the accident.
- Radios for road service for drivers with mechanical trouble, directs tourists to their destination, gives information about lodging, restaurants and tourist attractions.
- Provides traffic assistance and control during road repairs, fires and emergencies.
- Writes reports and maintains police records.
- May instruct trainees in State police schools, pilot police aircraft, specialize in fingerprint classification, analysis of criminal evidence.

LANGUAGE SKILLS:

- ENGLISH: Oral skills: issuing tickets to motorists; directing traffic; providing assistance in an emergency; radioing for service. Reading and writing skills: report writing; issuing tickets; maintaining records.

- OTHER LANGUAGE: Oral skills: issuing tickets to motorists; providing assistance in an emergency.

TRAINING REQUIREMENTS:

PRIOR: High school or equivalent preferred by most States. Completion of a competitive exam.

CONCURRENT: Must be U.S. citizen. Recruits enter a formal training program for several months. Experienced officers take advanced training in police science, administration, criminology. Classroom instruction in State laws and jurisdictions, procedures for accident investigation, patrol, and traffic control. Learn to handle firearms, give first aid, etc.
TRAINING AVAILABILITY:

Junior colleges, colleges and universities, special police institutions such as the National Academy of the Federal Bureau of Investigation.

EARNINGS:

1980:

beginning: $14,000 per year.
maximum: $20,000 and above per year in some States.
sergeants: $16,500 to $21,600 per year.
lieutenants: $18,100 to $23,800 per year.

Higher in West; lower in South.

ADVANCEMENT OPPORTUNITIES:

Private to corporal, sergeant, first sergeant, lieutenant, captain.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB-TITLE: COMMUNITY AFFAIRS OFFICER

DUTIES:

- Identifies problems in a specific community.
- Acts as the liaison between the community and the Police Department.
- Obtains positive and negative feedback from the community.
- Works out any problems that may exist regarding the Department's role in the community.

LANGUAGE SKILLS:

ENGLISH: Oral skills: identifying community problems; obtaining feedback from community members; helping solve problems. Reading and writing skills: report preparation; note taking.

OTHER LANGUAGE: Oral skills: identifying community problems; obtaining feedback from community members; helping solve problems.

TRAINING REQUIREMENTS:

PRIOR: High school usually required, but not always if have experience in a field related to Law Enforcement. Experience as a Police Officer. Selected by the commanding officer for his/her ability to relate to the community. College often preferred, at least 1-2 years. Completion of competitive exam.

CONCURRENT: Must be U.S. citizen. On-the-job training for police cadets (trainees) as well as officers; classroom instruction includes constitutional law and civil rights, State laws, local ordinances, traffic control, accident investigation.

TRAINING AVAILABILITY:

Colleges and universities, junior colleges offer courses in Law Enforcement, Criminal Justice. Police Department academies.

EARNINGS:

1980:

beginning: $13,000 to $16,500 per year.
experienced: $19,000 to $25,000 per year.
ADVANCEMENT OPPORTUNITIES:

Lateral movement to other areas of specialization, as well as the same opportunities as for police officers; private to corporal, sergeant, first sergeant, lieutenant, captain. Completion of a competitive examination.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: DETECTIVE

DUTIES:

- Investigates suspected criminals or facts of particular case to detect planned criminal activity or clues.
- Frequent known haunts of criminals and becomes familiar with criminals to determine criminals' habits, associates, characteristics and other personal information.
- Records and reports such information to commanding officer.
- Investigates crimes and questions witnesses.
- Examines scene of crime to obtain clues and gather evidence.
- Arrests or assists in arrest of criminals or suspects.
- Prepares assigned cases for court. Testifies before court and grand jury.

LANGUAGE SKILLS:

ENGLISH: Oral skills: arresting criminals; investigating cases; reporting information to commanding officer; questioning witnesses; testifying. Reading and writing skills: report preparation; planning strategies; preparing court cases.

OTHER LANGUAGE: Oral skills: investigating cases; arresting criminals; questioning witnesses.

TRAINING REQUIREMENTS:

PRIOR: Experience as a Police Officer. Recommendation as a good arresting officer.

CONCURRENT: On-the-job training.

TRAINING AVAILABILITY:

Police training academy.
EARNINGS:
$20,000 to $25,000 per year, large urban area.

ADVANCEMENT OPPORTUNITIES:
To sergeant, lieutenant, and captain, based on competitive exam results and job performance.

INTERNATIONAL OPPORTUNITIES:
Not applicable.
JOB TITLE: CORRECTION OFFICER

DUTIES:

- Charged with the safekeeping of persons who have been arrested, are awaiting trial or who have been convicted and sentenced to serve time in a correctional institution.
- Supervises the conduct of inmates or parolees, i.e., working, exercising, eating and bathing.
- Enforces rules and regulations and often counsels inmates.
- Gives and oversees work assignments for inmates as well as instructs and helps them.
- Serves as guards on towers and gates.
- Counts inmates to make sure all are present.
- Examines facilities for the safety and security of the prisoners.
- Checks cells and other areas for unsanitary conditions, fire hazards and infractions of rules.
- Periodically inspects locks, window bars, grill doors, and gates.
- Reports on inmates' conduct, disturbances, violations of rules or any unusual occurrences.
- Keeps records of inmates' activities.
- Helps inmates with problems.
- Participates in programs designed to prepare inmates for eventual release to the community.
- Acts as entrance gate officer and searches visitors for contraband; admits visitors, supervises visits, escorts visitors through institution.

LANGUAGE SKILLS:

ENGLISH: Oral skills: speaking effectively; following directions; supervising and helping inmates. Reading and writing skills: reading and interpreting written material accurately and rapidly; writing legibly; preparing accurate, objective written reports using good grammar, composition and correct spelling.
OTHER LANGUAGE: Oral skills: supervising and helping inmates.

TRAINING REQUIREMENTS:

PRIOR: High school, equivalent and/or work experience. Some States require 1 or 2 years of experience in correction or police work (college may be substituted on a year-for-year basis in some States).

CONCURRENT: Most States provide on-the-job training, 2 to 6 months, at the Department of Corrections Training Academy.

TRAINING AVAILABILITY:

Federal government and almost every State provide training. Some States have special training academies. Experienced officers sometimes receive in-service training.

EARNINGS:

1980:

Federal level:

starting: $12,266 per year.

experienced: $14,900 per year.

State level:

starting: $11,900 to $20,000 per year in some States.

Local level:

starting: $10,600 per year, for correction officers and $13,200 per year for supervisors.

ADVANCEMENT OPPORTUNITIES:

With additional education, experience and training, officers may advance to correction sergeant and supervisory or administrative positions.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: CORRECTIONAL SERGEANT

DUTIES:

- Supervises the work of Correctional Officers in the safe custody, discipline, and welfare of inmates or parolees on an assigned watch or in a major area.
- Calls roll of Correctional Officers supervised.
- Makes inspection tours to see that Correctional Officers are alert and diligent.
- Conveys complaints to supervisors.
- Takes, receives, and checks periodic counts of inmates.
- Directs the inspection of quarters of inmates.
- Examines incoming and outgoing mail.
- Develops procedures and posts orders.
- Provides on-the-job training for Correctional Officer staff.
- Promotes acceptable attitudes and behavior of inmates.
- Rates inmates on conduct and productivity.
- Directs visits to inmates, makes arrangements for showing visitors about the facility.
- Reports infractions of rules, suspicious occurrences; takes or recommends appropriate action.
- Prevents escapes and injury by inmates.
- Searches for and recaptures escaped inmates.
- Receives, checks, and issues guns, ammunition, and other supplies and equipment.
- May participate as a leader in the group treatment program for inmates or parolees.
- Prepares employee and performance reports, keeps records, prepares reports.

LANGUAGE SKILLS:

ENGLISH: Oral skills: directing, instructing inmates on a group and individual basis; explaining rules to visitors. Reading and writing skills; report preparation; record keeping.
OTHER LANGUAGE: Oral skills: directing, instructing inmates on a group and individual basis; explaining rules to visitors.

TRAINING REQUIREMENTS:

PRIOR: One year of experience performing the duties of a Correctional Program Supervisor; or

CONCURRENT: Two years of experience performing duties comparable to those of a Correctional Officer, Group Supervisor, or Youth Counselor. Basic math skills.

TRAINING AVAILABILITY:

State Department of Corrections Training Academy.

EARNINGS:

1979:

starting: $18,000 to $22,000 per year.

ADVANCEMENT OPPORTUNITIES:

To supervisory or administrative positions with experience.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
PROTECTIVE SERVICES
CAREER PROGRESSION LADDER

Chief Officer
  
  Captain
  
  Lieutenant
  
  First Sergeant
  
  Sergeant
  
  Corporal
  
  Private
CORRECTION
CAREER PROGRESSION LADDER

Parole Agent

Correction Program Supervisor

* Correction Sergeant

* Correction Officer

*Job descriptions included in this chapter.
### CHAPTER XIV

**RECREATION: OCCUPATIONS**

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<td>301</td>
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<td>Recreation Assistant</td>
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<td>Community Information Aide</td>
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<tr>
<td>Recreation Specialist</td>
<td>311</td>
</tr>
<tr>
<td>Career progression ladder</td>
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</tr>
</tbody>
</table>
RECREATION OCCUPATIONS

Prerequisites for Bilingual Vocational Training Project Development

Three occupations are presented in this chapter. These are:

- Recreation Assistant;
- Community Information Aide; and,
- Recreation Specialist.

Employment in this occupation requires a high school diploma, at the minimum. For those seeking full-time career positions as recreation administrators or directors, a college degree in parks and recreation is usually preferred by employers. Recreation leaders can be promoted to supervisory or administrative positions with a combination of education or experience, or with graduate training. English language skills used on the job are primarily other skills—conducting recreation programs, organizing and supervising athletic teams, running discussion groups, handling and assisting with problems in the community. Reading and writing skills include filling out forms and accident reports and keeping records.

Some recreation jobs require specialized training in a particular area, such as drama, athletics or music. Courses offered in college park and recreation programs include park management, outdoor recreation, park and recreation administration, and business administration. Training is available at community and junior colleges and colleges and universities; many colleges use the curriculum developed by the American Camping Association.

The National Recreation and Park Association (NRPA) has developed national registration standards which include requirements for education and experience. These standards have been adopted by 30 States—program administrators should check to see if their State has adopted the standards.

Competition for jobs as recreation workers is expected to be strong, particularly in public recreation agencies. Individuals with formal training and experience in the recreation field will have the best job...
opportunities. The job outlook is largely dependent on government funding, which has been decreased in recent years. The best opportunities will be in private and commercial recreation.

Employment projections

Employment in recreation occupations is expected to grow at a higher rate in 1990 than employment in all occupations combined. Their numbers are expected to increase by about 25 percent under the low projection to about 33 percent according to the high projection.
<table>
<thead>
<tr>
<th>Job Title</th>
<th>Education</th>
<th>Training/Experience</th>
<th>Language Skills Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recreation Specialist</td>
<td></td>
<td>Discussing problems; suggesting improvements; instructing, advising, officiating in activities</td>
<td>Makes recommendations for improving programs; report writing.</td>
</tr>
<tr>
<td>Recreation Assistant</td>
<td>High school</td>
<td>Conducting recreation programs; organizing teams; running discussion groups.</td>
<td>Conducting recreation programs; organizing teams; running discussion groups.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Record keeping; filling out forms, accident reports.</td>
<td>None.</td>
</tr>
</tbody>
</table>

Job titles are listed in order of advancement. Further details are provided in the job descriptions for each job title. Additional job titles are included on the career progression ladder to show advancement opportunities.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1978</td>
<td>1990</td>
</tr>
<tr>
<td>ALL OCCUPATIONS COMBINED</td>
<td>97,610</td>
<td>121,447</td>
</tr>
<tr>
<td>PROFESSIONAL, TECHNICAL &amp; RELATED WORKERS</td>
<td>15,570</td>
<td>20,295</td>
</tr>
<tr>
<td>OTHER PROFESSIONAL AND TECHNICAL WORKERS</td>
<td>4,183</td>
<td>5,692</td>
</tr>
<tr>
<td>Recreation Workers, Group</td>
<td>121</td>
<td>157</td>
</tr>
<tr>
<td>SERVICE WORKERS</td>
<td>14,414</td>
<td>20,074</td>
</tr>
<tr>
<td>SELECTED PERSONAL SERVICE WORKERS</td>
<td>1,547</td>
<td>2,206</td>
</tr>
<tr>
<td>Recreation Facility Attendants</td>
<td>65</td>
<td>85</td>
</tr>
</tbody>
</table>

*Employment projections are based on data from the U.S. Bureau of Labor Statistics. For each industry, employment in 1978 is shown, and three series of employment projections are shown for 1990: Low (L), Medium (M) and High (H). For comparison, projections also are shown (in capital letters) for all occupations combined and for the major occupational groups of which the occupations studied are a part. The projections are explained and additional detail is provided in Appendix A.
DATA SOURCES

- D.C. Department of Recreation

ADDITIONAL INFORMATION

- About recreation as a career, employment opportunities, colleges/universities offering recreation curricula, accreditation, and registration standards:

  --National Recreation & Park Association
  Division of Professional Services
  3101 Park Center Drive
  Alexandria, VA  22302

CORPORATION/AGENCY LISTING JOB OPPORTUNITIES

- City of Coachella

LOCATION

Los Angeles, CA
JOB TITLE: RECREATION ASSISTANT

DUTIES:

- Serves as Recreation Leader.
- Assists in development, organization and implementation of programs and activities at a recreation center or unit.
- Directs, instructs, officiates and participates in the various recreation programs and activities at the recreation unit.
- Conducts fairly difficult and complex recreation programs and activities without direct supervision.
- Organizes athletic teams, holds practices and competitive games.
- Aids in setting up schedules for tournaments, meets, and contests held at unit.
- Organizes and stimulates discussion groups, teen clubs, and special interest groups.
- Improves and carries out impromptu recreation programs designed to attract and retain the attention and interest of various age groups and different economic levels of the community.
- Works with Recreation Specialist to plan and develop special activities for holidays and seasonal celebrations.
- Performs administrative duties.
- Assists in maintenance records of attendance for lower grade recreation assistants.
- Fills out accident reports to record all injuries received by staff or program participants.
- Participates in community activities, noting experience, interests, and needs of the community, to aid in developing and carrying-out a more flexible recreation program.
- Attends meetings of community organizations with supervisor, to gain experience as a Recreation Leader and to broaden learning experience for advancement to higher levels of responsibility.
LANGUAGE SKILLS:

ENGLISH: Oral skills: directing, instructing, officiating at recreation programs; planning, developing special programs; leading discussion groups with community members. Reading and writing skills: developing, organizing, setting up programs; record keeping; filling out accident reports; note taking at meetings.

OTHER LANGUAGE: Oral skills: directing, instructing, officiating at recreation programs; planning, developing programs with community member feedback; leading discussion groups.

TRAINING REQUIREMENTS:

PRIOR: High school required.

CONCURRENT: On-the-job training.

TRAINING AVAILABILITY:

In-house. Colleges and universities offer courses.

EARNINGS:

1980 survey: average earnings:

beginning: $13,000 per year.

experienced: $17,000 per year.

1981:

Associate of Arts: $7,000 to $10,000 per year.

Bachelor's: $10,000 to $13,000 per year.

ADVANCEMENT OPPORTUNITIES:

To Recreation Specialist.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: COMMUNITY INFORMATION AIDE

DUTIES:

- Performs supportive administrative and clerical duties.
- Develops an organized method of gathering information about recreational activities.
- Maintains contact with other public agencies to insure cooperation in publicizing organization's activities.
- Disseminates news to interested groups and individuals about recreation programs, plans, and activities of the organization.
- Assists in the preparation of display material for bulletin boards, meetings, conferences, exhibits, demonstrations, etc.
- Keeps recreation officials abreast of organization's activities.
- Contributes suggestions towards improving public knowledge of recreation programs operating throughout the city.
- Collects information for in-house publications.
- Examines newspapers, bulletins, press releases and communications with publicity directors of performing arts, athletic associations and other private recreation organizations in the metropolitan area to collect and confirm the status of current events.
- Contacts individuals in the community responsible for specific activities or programs to assure that all information to be published is correct.
- Writes individual event cards for editing and review, submits to composer-typist for final copy.
- Selects and classifies all resource material for publications, filing according to subject matter and date of occurrence.
- Serves as business manager for in-house publication.
- Records all fees mailed or received for in-house publication subscriptions.
- Makes daily deposits from subscriptions in Accounting Office.
• Prepares and submits monthly financial records for in-house publication subscriptions as well as special photographic orders.

• Establishes and maintains files for all bulk and special orders and billing.

• Makes monthly estimates for approximate number of copies ordered of in-house publication.

• Distributes pre-publication copies of in-house publication drafts for use by other publications in the metropolitan area.

• Maintains mailing list of individuals, public agencies, private agencies, governmental personnel, committees and other groups having interest in organization's programs and activities.

• Handles mailing operations relative to in-house publication operating the Scriptomatic-Addressograph machine and Pitney Bowes stuffing machine for individual orders.

• Issues renewal slips, maintains renewal file for in-house publication.

• Maintains master Scriptomatic and alphabetical cross-reference file for subscribers.

• Sorts for information purposes or to appropriate personnel, forwards mail to supervisor that may require attention.

• Maintains a complete and current information file pertaining to all recreation activities and organizations in the metropolitan area.

• Researches special request when information is not on file.

• Maintains continuous file of newspaper clippings of all organizational and recreation-oriented articles.

• Performs clerical duties pertinent to office operations and assists supervisor in coordinating information functions.

**LANGUAGE SKILLS:**

**ENGLISH:** Oral skills: contacting other recreation agencies/organizations, individuals in the community; makes suggestions towards improving public knowledge. Reading and writing skills: clerical—filing,
maintaining mailing lists, sorting mail; examining
newspapers; report preparation; disseminating news to
community; good grammar, vocabulary.

OTHER LANGUAGE: Oral skills: contacting, working with
community members, organizations; collecting information.

TRAINING REQUIREMENTS:

PRIOR: High school required. Experience helpful.

CONCURRENT: On-the-job training.

TRAINING AVAILABILITY:

In-house.

EARNINGS:

$12,854 to $16,706 per year, large urban area.

ADVANCEMENT OPPORTUNITIES:

To Community Information Specialist.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: RECREATION SPECIALIST

DUTIES:

- Works closely with director and assistant director in all facets of the program.

- Works closely with supervisor by discussing problems encountered, and needs and interests of specific neighborhoods to which assigned. Assigned duties are based primarily on incumbent's special interests, skills and availability. Groups for which specific programs are designed include pre-schoolers, youth, adults and senior citizens.

- Attends various meetings of neighborhood groups and organizations such as civic and citizen associations, school and church groups, PTAs, adult and youth groups, merchants and businessmen. Contacts are for publicizing programs, stimulating neighborhood interest and cooperation, negotiating for gifts, donations and to obtain volunteer sponsorship and services.

- Assists, instructs, advises, officiates or participates in the various activities to which assigned.

- Concerned with technical accuracy of games and activities, and in achieving long-range aims of recreation.

- Makes daily inspections of all equipment and of facilities to ascertain a degree of safety.

- Makes suggestions and recommendations for improvement of programs or new programs to meet the needs and desires of the neighborhood.

LANGUAGE SKILLS:

ENGLISH: Oral skills: discussing problems with supervisor; reporting on meeting results, assisting, instructing, officiating, advising at community group activities; suggesting improvements. Reading and writing skills: note taking at community meetings; writing suggestions and recommendations.

OTHER LANGUAGE: Oral skills: reporting on community meetings; instructing, officiating, advising at community group activities.

TRAINING REQUIREMENTS:

PRIOR: High school required.
CONCURRENT: On-the-job training.

TRAINING AVAILABILITY:
In-house. Many community colleges offer associate degree recreation leadership and technician programs. In addition, there are numerous bachelor, master’s and doctoral programs offered by colleges and universities.

EARNINGS:
$14,328 to $18,630 per year.

ADVANCEMENT OPPORTUNITIES:
Supervisory positions.

INTERNATIONAL OPPORTUNITIES:
Not applicable.
RECREATION

CAREER PROGRESSION LADDER

Recreation Analyst
Supervisory Recreation Specialist
Senior Technical Field Assistant
* Recreation Specialist
* Recreation Assistant
Assistant Director Recreation Center
Community Information Specialist
Community Information Aide

* = Job descriptions included in this chapter.
### Chapter XV

**Rehabilitation and Therapy Occupations**

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<td>Actual and projected employment figures</td>
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<td>Listing of corporations/organizations</td>
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<td>Job descriptions</td>
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<tr>
<td>Certified Physical Therapist Assistant</td>
<td>325</td>
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<tr>
<td>Respiratory Therapy Technician and Therapist</td>
<td>327</td>
</tr>
<tr>
<td>Career progression ladder</td>
<td>329</td>
</tr>
</tbody>
</table>
REHABILITATION AND THERAPY OCCUPATIONS

Prerequisites for Bilingual Vocational Training Project Development

Included in this chapter are job descriptions for the following three rehabilitation and therapy occupations:

- Certified Occupational Therapy Assistant;
- Certified Physical Therapist Assistant; and,
- Respiratory Therapy Technician and Therapist.

Occupational and physical therapists are not included because a college degree is required for job placement.

For all of the rehabilitation and therapy occupations a high school education or the possession of a General Education Diploma (GED) is required. This should be considered during the screening and recruitment of trainees. It is stressed by employers that individuals complete a one- to two-year training program to be a certified assistant or a technician (a respiratory therapist can complete a two- to four-year program). Training in this field is not widely available; it is offered by a few community colleges and some technical and vocational schools. Since formal training is preferred by employers but is not always accessible, this would be a good occupation for bilingual vocational training administrators to consider when developing or modifying their programs.

English and other language skills are extremely important since workers have extensive contact with patients, many of whom do not speak English. English-as-a-second language classes can focus on instructing patients-(including children) how to use and/or care for tools, materials, equipment, how to care for themselves, and explaining treatment and procedures.

Course work for physical and occupational therapist assistants includes history and philosophy of rehabilitation, human growth and development, anatomy and physiology. Massage, therapeutic exercise, and
heat and cold therapy skills are also taught to physical therapist assistants. Respiratory therapy workers learn human anatomy and physiology, chemistry, physics, microbiology, and mathematics. Technical courses discuss procedures, equipment and clinical tests. The professional associations to be contacted for additional information in developing programs are listed in the "Listing of Corporations/Organizations" in this chapter by job title.

The job prospects for this occupation are very good to excellent as a result of greater health consciousness and widespread accessibility of hospital and surgical care through insurance coverage for much of the population.

Employment projections

Employment of physical therapists is projected to increase by 1990 by more than 50 percent—a rate of increase in excess of twice the average rate of growth for all occupations. Physical therapists rank 14th out of 340 occupations in terms of expected employment growth rate to 1990. It can be expected that with the increase in physical and occupational therapists, there will also be an increase in the number of assistants.
### TABLE 21
REHABILITATION AND THERAPY OCCUPATIONS
Prerequisites for Job Placement

<table>
<thead>
<tr>
<th>Job Title</th>
<th>Education</th>
<th>Training/Experience</th>
<th>Language Skills Required</th>
<th>Other Language</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>English</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Oral</td>
<td>Reading/Writing</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Oral</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Reading/writing</td>
</tr>
<tr>
<td>Respiratory Therapist</td>
<td></td>
<td>2-4 yr. training program (theory + clinical work).</td>
<td>Same as technician AND teaching, supervising staff.</td>
<td></td>
</tr>
<tr>
<td>Respiratory Therapy Technician</td>
<td></td>
<td>1 yr. training program preferred to on-the-job training.</td>
<td>Explaining procedures to patient; reporting patient's problems; attending lectures, training sessions.</td>
<td></td>
</tr>
<tr>
<td>Certifed Occupational Therapy Assistant</td>
<td>High school.</td>
<td>1-2 yr. training program + completion of a writer national proficiency exam.</td>
<td>Instructing patients; evaluating and communicating patient's progress; recordkeeping; reporting writing; developing patient care plan; ordering supplies.</td>
<td>None.</td>
</tr>
</tbody>
</table>

Job titles are listed in order of advancement. Further details are provided in the job descriptions for each job title. The career progression ladder includes additional job titles to show advancement opportunities.
Table 22
Employment in Rehabilitation and Therapy—Occupations
Actual 1978 and Projected 1990*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL OCCUPATIONS COMBINED</td>
<td>97,610</td>
<td></td>
</tr>
<tr>
<td>PROFESSIONAL, TECHNICAL AND RELATED WORKERS</td>
<td>15,570</td>
<td></td>
</tr>
<tr>
<td>THERAPISTS</td>
<td>139</td>
<td></td>
</tr>
<tr>
<td>Physical Therapists</td>
<td>31</td>
<td></td>
</tr>
<tr>
<td>Speech and Hearing Clinicians</td>
<td>34</td>
<td></td>
</tr>
</tbody>
</table>

*Employment projections are based on data from the U.S. Bureau of Labor Statistics. For each industry, employment in 1978 is shown, and three series of employment projections are shown for 1990: Low (L), Medium (M) and High (H). For comparison, projections also are shown (in capital letters) for all occupations combined and for the major occupational groups of which the occupations studied are a part. The projections are explained and additional detail is provided in Appendix A.
DATA SOURCES

- Fairfax Hospital, VA
- Gouverneur Hospital, NY
- Northern Virginia Mental Health Center, VA
- St. Mary's Hospital and Medical Center, CA

ADDITIONAL INFORMATION

- OCCUPATIONAL THERAPY
  --As a career; qualifications required to take certification examination:

  - American Occupational Therapy Association
    1383 Piccard Drive
    Rockville, MD 20850

  --Openings, training opportunities:

    - Local hospital rehabilitation departments
    - Community health centers
    - Long-term care facilities
    - Psychiatric hospitals
    - Schools for children with developmental and learning disabilities
    - Home health programs

- PHYSICAL THERAPY
  --As a career, list of accredited educational programs.

    - American Physical Therapy Association
      1156 15th Street, N.W.
      Washington, D.C. 20005

- RESPIRATORY/INHALATION THERAPY
  --Education programs:

    - American Association for Respiratory Therapy
      1720 Regal Row
      Suite 112
      Dallas, TX 75235

  --Certification of Therapists and technicians:

    - The National Board for Respiratory Therapy, Inc.
      11015 W. 75th Terrace
      Shawnee Mission, KS 66214
--Openings, training opportunities:

- Local hospitals
- Community health centers

<table>
<thead>
<tr>
<th>CORPORATION/AGENCY LISTING JOB OPPORTUNITIES</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>• French hospital</td>
<td>Los Angeles, CA</td>
</tr>
</tbody>
</table>
JOB TITLE: CERTIFIED OCCUPATIONAL THERAPY ASSISTANT

DUTIES:

- Assists in evaluation of the patient's performance of the activities of daily living and degree of functioning.
- Instructs disabled patients in activities of daily living, such as washing, dressing, eating, and handling of such corrective devices as braces and wheel chairs.
- Instructs patients in fine and applied arts and certain pre-vocational activities for mental and physical re-education.
- Teaches therapeutic arts and crafts, including design in leather, metal, plastics, textile and wood.
- Assists in design and adapting of equipment and working/living environment and fabricates splints.
- Participates with supervisor in evaluation of and communication of patient's progress to physician.
- Assists supervisor in development of a written care plan for integration into a total care plan.
- Assists supervisor in development of a maintenance program for other patient care personnel for follow-up purposes.
- Assists supervisor in setting up programs for the guidance of families with handicapped or disabled members in the home.
- Prepares work materials, maintains equipment and requisitions supplies.
- Keeps records and makes reports.

LANGUAGE SKILLS:

ENGLISH: Oral skills: helping, instructing patients; following instructions; discussing cases with supervisor and physician. Reading and writing skills: report writing; keeping records.

OTHER LANGUAGE: Oral skills: helping, instructing patients; following instructions; discussing cases with supervisor, physician.
TRAINING REQUIREMENTS:

PRIOR: High school graduate. Certification by the American Occupational Therapy Association.

CONCURRENT: On-the-job training--hospitals and health care facilities.

TRAINING AVAILABILITY:

Junior and community colleges, Armed Forces.

EARNINGS:

$13,122 to $17,496 per year.

ADVANCEMENT OPPORTUNITIES:

Occupational therapy assistants who are certified by the American Occupational Therapy Association and have 4 years of approved work experience may take the examination to become a registered occupational therapist.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: CERTIFIED PHYSICAL THERAPIST ASSISTANT

DUTIES:

- Follows predetermined physical therapy treatment program on the basis of medical prescription and licensed Physical Therapist's evaluation for patients with neurological, vascular, cardio-pulmonary, orthopedic, medical, neuromuscular and musculoskeletal disorders.

- Utilizes a range of physical therapeutic treatments involving therapeutic exercises, massage and heat, light, sound, water, electromagnetic and electrical modalities.

- Uses traction equipment in the treatment of spinal impairment or diseases, acting only upon the licensed Physical Therapist's approval and direction.

- Observes patient's reaction during treatment sessions, compiles records and enters information on Physical Therapy chart; submits written reports to supervisors.

- Makes appropriate changes in treatment plans only on approval of licensed Physical Therapist.

- Fits patients for, adjusts and trains in use of supportive devices such as crutches, canes, wheelchairs, and walkers.

- Confers with members of physical therapy staff and other health team members to exchange and discuss patient information.

- Performs related clerical duties, such as taking inventory and requisitioning supplies and equipment.

- Prepares work areas and materials, maintains special equipment.

LANGUAGE SKILLS:

ENGLISH: Oral skills: following directions; observing patient; fitting and training patients in use of supportive devices; ordering supplies. Reading and writing skills: taking inventory; ordering supplies; writing reports.

OTHER LANGUAGE: Oral skills: fitting and training patients in use of supportive devices.
TRAINING REQUIREMENTS:

PRIOR: Graduation from an Associate Degree program for Physical Therapist Assistants either registered by the State Education Department or which has received interim or final approval from the American Physical Therapy Association.

CONCURRENT: Current certification and registration with the State Education Department as a Physical Therapist Assistant. On-the-job training in hospitals and health care centers.

TRAINING AVAILABILITY:

In 1980, there were 58 accredited programs; most were in community colleges. In-house: hospitals, health care centers.

EARNINGS:

$13,122 to $17,496 per year.

ADVANCEMENT OPPORTUNITIES:

After earning bachelor's degree, advance to physical therapist.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: RESPIRATORY (INHALATION) THERAPY TECHNICIAN AND THERAPIST

DUTIES:

Respiratory Therapy Technician:

- Prepares for and administers gas humidification and aerosol therapies and intermittent positive-pressure breathing (IPPB) treatments.
- Assembles and applies pressure devices such as intermittent pressure breathing apparatus, expiratory pressure masks, respirators, resuscitators, in addition to portable equipment, suction machines.
- Prepares and positions patients for treatment.
- Assists with long term continuous artificial ventilation, special therapeutic procedures and cardio-pulmonary resuscitation.
- Administers drugs which are given through inhalation procedures.
- Performs blood gas analysis for oxygen tension, carbon dioxide tension and fix, and performs other routine laboratory procedures, measured or calculated.
- Performs routine testing, maintenance, adjustment; and makes minor equipment repairs. Calibrates or standardizes equipment.
- Cleans, sterilizes and generally maintains respiratory therapy equipment.
- Keeps adequate and accurate records of patient's therapy and other departmental records.
- Attends lectures and training sessions.

Respiratory Therapist:

- Same duties as technician, higher level of expertise.
- Some teaching and supervisory duties.

LANGUAGE SKILLS:

ENGLISH: Oral skills: conversing with patient; explaining procedure; making patient feel at ease. Reading and writing skills: record keeping; reporting
patient's problems to therapist or other member of health care team. Knowledge of safety language extremely important due to the highly flammable nature of the inhalants.

OTHER LANGUAGE: Oral skills: conversing with patient; explaining procedure; making patient feel at ease.

TRAINING REQUIREMENTS:

PRIOR: High school required to enter program. Graduation from a respiratory therapy technician program approved by the Committee on Allied Health Education and Accreditation (CAHEA) of the American Medical Association.

CONCURRENT: On-the-job training.

TRAINING AVAILABILITY:

Technician courses usually are 1-year certificate programs. Respiratory therapy programs are offered by many institutions. Bachelor's degree (4-year program) and associate degree (2-year program) can be obtained.

EARNINGS:

1981 survey:

starting: $14,200 to $18,100 per year.

ADVANCEMENT OPPORTUNITIES:

Individuals who have completed a CAHEA-approved technician program and have 1 year of experience may apply to take the examination for the Certified Respiratory Therapy Technician (CRTT) credential.

With proper training courses can advance to the therapist level. Individuals who have a certificate of completion from a CAHEA-approved therapist training program, 62 semester hours of college credit, and 1 year of experience can apply to take the registration examination offered by the National Board for Respiratory Therapy (NBRT). The Registered Respiratory Therapist (RRT) credential is awarded to those who pass the examination.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
REHABILITATION AND THERAPY
CAREER PROGRESSION LADDER

Director

Asst. Director

* Therapist

* Therapy Technician

* Certified Therapy Assistant

* Job descriptions included in this chapter.
### CHAPTER XVI

RETAIL AND WHOLESALE TRADE OCCUPATIONS

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<tr>
<td>Employment projections</td>
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<tr>
<td>Prerequisites for job placement</td>
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<td>Actual and projected employment figures</td>
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<td>Listing of corporations/organizations</td>
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<td>Job descriptions</td>
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<tr>
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<td>341</td>
</tr>
<tr>
<td>Wholesale Trade Sales Worker</td>
<td>343</td>
</tr>
<tr>
<td>Career progression ladder</td>
<td>345</td>
</tr>
</tbody>
</table>
Prerequisites for Bilingual Vocational Training Project Development

Three job descriptions for retail and wholesale trade occupations are included in this chapter. These are:

- Cashier;
- Retail Trade Sales Worker; and,
- Wholesale Trade Sales Worker.

(Some general information is provided for a buyer on the "Prerequisites for Job Placement" table in this section.)

For all of these occupations a high school education is either desirable or preferred by employers when hiring new employees. However, an individual with some knowledge of business arithmetic, typing, bookkeeping, and operating a cash register would have an advantage in being hired. Several bilingual vocational training programs have been able to provide this type of training to limited English-speaking adults. Although college is preferred for buyers and some wholesale trade workers, an individual with retailing experience could be chosen to participate in an assistant buyer training program on-the-job, and advance to buyer in this manner.

English-as-a-second language classes should focus on handling customers' complaints and problems, helping the purchaser in making a selection, and telephone skills. Reading and writing skills that are used on the job include writing sales receipts, filling out exchange forms, and checking a customer's credit.

Many cashiers are members of the United Food and Commercial Workers International Union. Union cashiers' wages generally are higher than nonunion workers. Wages also are highest in large metropolitan areas and in the West and the North Central region and lowest in the South. Wages also vary in that some workers receive commission as part of their earnings, while others work solely on a commission basis.
Training is available in many public school vocational programs for cashiers and retail trade workers. For employees in the wholesale trade, approximately two years of on-the-job training are necessary before a trainee is prepared for selling. Trade associations offer training programs as well as large wholesale firms.

**Employment Projections**

The growth rate of employment in the retail trade (excluding eating and drinking places) and wholesale trade industries is expected to be slightly lower than the growth rate of all industries combined. However, because of their size, these two industries will account for more than 2.7 million new jobs by 1990. More than 1.1 million of these jobs will be for sales clerks and cashiers. In terms of employment growth rates, cashier is the only occupation in this grouping with a substantially higher-than-average growth rate.
### Table 23: Retail and Wholesale Trade Occupations

#### Prerequisites for Job Placement

<table>
<thead>
<tr>
<th>Job Title</th>
<th>Education</th>
<th>Training/Experience</th>
<th>Language Skills Required</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Buyer</strong></td>
<td>College preferred.</td>
<td>Retailing experience helpful; work 1 yr. as asst. buyer. (6-8 month training program on-the-job for college graduates).</td>
<td><strong>English</strong>&lt;br&gt;Oral Supervising sales workers, asst. buyers; dealing with manufacturers' sales representatives.&lt;br&gt;Reading/Writing Keeping inventories; studying market research reports, past sales records; reading trade magazines.</td>
</tr>
<tr>
<td><strong>Retail Trade Sales Worker</strong>&lt;sup&gt;*&lt;/sup&gt;</td>
<td>High school preferred&lt;br&gt;College important for advancement.</td>
<td></td>
<td><strong>Other Language</strong>&lt;br&gt;Oral Supervising sales workers, asst. buyers; dealing with manufacturers' sales representatives.</td>
</tr>
<tr>
<td><strong>Cashier</strong></td>
<td>High school helpful.</td>
<td>Courses in business arithmetic, book-keeping, typing, cash register operation helpful.</td>
<td><strong>English</strong>&lt;br&gt;Oral Assisting customers; telephone skills; writing receipts for sales, exchanges.&lt;br&gt;Reading/Writing Handling customers' complaints.</td>
</tr>
</tbody>
</table>

Job titles are listed in order of advancement. Further details are provided in the job descriptions for each job title. The career progression ladder includes additional job titles to show advancement opportunities.

---

*Job title indicates specific role within the retail or wholesale trade sector.*
### Table 24

Employment in Retail and Wholesale Trade Occupations
Actual 1978 and Projected 1990*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1978</td>
<td>1990</td>
</tr>
<tr>
<td>ALL OCCUPATIONS COMBINED</td>
<td>97,610</td>
<td></td>
</tr>
<tr>
<td>PROFESSIONAL, TECHNICAL AND</td>
<td>15,570</td>
<td></td>
</tr>
<tr>
<td>RELATED WORKERS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MANAGERS, OFFICIALS, AND</td>
<td>8,802</td>
<td></td>
</tr>
<tr>
<td>PROPRIETORS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales Managers, Retail Trade</td>
<td>261</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Store Managers</td>
<td>926</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wholesalers</td>
<td>234</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OTHER PROFESSIONAL AND TECHNICAL WORKERS</td>
<td>4,183</td>
<td></td>
</tr>
</tbody>
</table>

*Employment projections are based on data from the U.S. Bureau of Labor Statistics. For each industry, employment in 1978 is shown, and three series of employment projections are shown for 1990: Low (L), Medium (M), and High (H). For comparison, projections also are shown (in capital letters) for all occupations combined and for the major occupational groups of which the occupations studied are a part. The projections are explained and additional detail is provided in Appendix A.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buyers, Retail and Wholesale Trade</td>
<td>238</td>
<td>296</td>
<td>L: +24.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>M: +25.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>H: +34.2</td>
</tr>
<tr>
<td>SALESWORKERS</td>
<td>6,443</td>
<td>7,989</td>
<td>L: +24.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>M: +25.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>H: +34.0</td>
</tr>
<tr>
<td>Sales Clerks</td>
<td>2,771</td>
<td>3,362</td>
<td>L: +21.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>M: +21.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>H: +30.0</td>
</tr>
<tr>
<td>CLERICAL WORKERS</td>
<td>17,820</td>
<td>22,219</td>
<td>L: +24.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>M: +26.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>H: +33.0</td>
</tr>
<tr>
<td>Cashiers</td>
<td>1,501</td>
<td>2,046</td>
<td>L: +36.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>M: +38.0</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>H: +44.3</td>
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<tr>
<td>Shipping and Receiving Clerks</td>
<td>378</td>
<td>448</td>
<td>L: +18.5</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>M: +19.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>H: +28.9</td>
</tr>
</tbody>
</table>
DATA SOURCES

- Hyatt Regency Hotel, Washington, D.C.
- New York Visitors and Convention Center
- Sears, Roebuck & Company, Washington, D.C.
- Solar International Shipping Agency, NY
- Waldorf - Astoria Hotel, NY

ADDITIONAL INFORMATION

---Career information:

- The National Retail Merchants Association
  100 W. 31st Street
  New York, NY 10001

---Employment opportunities:

- State employment service

CORPORATION/AGENCY LISTING JOB OPPORTUNITIES

<table>
<thead>
<tr>
<th>Corporation/Agency</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertisers Shipping Company, Inc.</td>
<td>New York, NY</td>
</tr>
<tr>
<td>Al Grover Marine Company</td>
<td>New York, NY</td>
</tr>
<tr>
<td>American Home Products Corporation</td>
<td>New York, NY</td>
</tr>
<tr>
<td>B &amp; J Fabric, Inc.</td>
<td>New York, NY</td>
</tr>
<tr>
<td>Barns &amp; Nobles Warehouse</td>
<td>New York, NY</td>
</tr>
<tr>
<td>Brooks Brothers</td>
<td>New York, NY</td>
</tr>
<tr>
<td>Lady Roi Garment Importer</td>
<td>New York, NY</td>
</tr>
<tr>
<td>Azteca Jewelers</td>
<td>Los Angeles, CA</td>
</tr>
<tr>
<td>Retail Store</td>
<td>Los Angeles, CA</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>Los Angeles, CA</td>
</tr>
<tr>
<td>Department Store</td>
<td>Los Angeles, CA</td>
</tr>
<tr>
<td>Real Estate</td>
<td>Los Angeles, CA</td>
</tr>
<tr>
<td>Equipment</td>
<td>Los Angeles, CA</td>
</tr>
</tbody>
</table>
JOB TITLE: CASHIER

DUTIES:

- Handles payments from customers.
- Receives money, makes change, fills out charge forms and gives receipts.
- Operates cash register, electronic register, or computerized scanning systems.
- May operate adding and change dispensing machine.
  - In theatres (box office cashier, ticket seller):
  - Operates ticket-dispensing machines.
  - Answers telephone inquiries.
  - In restaurants (cashier checker):
    - Handles reservations for meals and special parties, types menus or sells items at the candy and cigarette counter.
  - In supermarkets, self-service stores (checkout clerk, checker, grocery clerk):
    - Wraps or bags purchases.
    - Restocks shelves and marks prices, rearranges displays of merchandise and takes inventory.

LANGUAGE SKILLS:

ENGLISH: Oral skills: conversing with public in person or on the phone; answering questions. Reading and writing skills: filling out receipts, charge forms; taking inventory.

OTHER LANGUAGE: Oral skills: conversing with the public in person or on the phone; answering questions.

TRAINING REQUIREMENTS:

PRIOR: High school preferred. Sometimes experience required. Basic math skills, typing skills.

CONCURRENT: On-the-job training.
TRAINING AVAILABILITY:

Cashier training is offered as part of many public school vocational programs. Large firms often include classroom instruction in the use of electronic or computerized registers.

EARNINGS:

1980:
beginning: minimum wage—approximately $7,000 per year.

1981: survey:

experienced, full-time
(union members): $10,250 to $18,280 per year.

Higher in the West and North Central regions; lowest in the South.

ADVANCEMENT OPPORTUNITIES:

Limited, but a good stepping-stone to more responsible clerical jobs (bookkeeper or managerial). In retail businesses, to department or store managers.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: RETAIL TRADE SALES WORKER

DUTIES:

- Creates an interest in the merchandise.
- Answers questions about the construction of an article, demonstrates its use and shows various models and colors.
- Makes out sales or charge slips, receives cash payments and gives change and receipts.
- Handles returns and exchanges of merchandise and keeps work area neat.

In Small Stores:

- Helps order merchandise, stocks shelves or racks, marks price tags, takes inventory and prepares displays. Operates cash register.

LANGUAGE SKILLS:

ENGLISH: Oral skills: answering questions about merchandise; demonstrating and describing a product; explaining installation (if needed). Reading and writing skills: taking inventory; filling out forms, charge slips, receipts.

OTHER LANGUAGE: Oral skills: answering questions; demonstrating and describing products; explaining procedures for installation, repair, etc.

TRAINING REQUIREMENTS:

PRIOR: High school preferred. Basic math skills, cash register operation helpful.

CONCURRENT: On-the-job training. Some large stores offer work-study programs.

TRAINING AVAILABILITY:

In large stores formal training is offered, specializing in selling certain products.

EARNINGS:

1980: average earnings:

beginning: minimum wage—approximately $7,000 per year.

Earnings ranged from $8,312 to $14,203 per year for full-time workers. Some sales workers are paid salary plus commission or commission only.
ADVANCEMENT OPPORTUNITIES:

Sales worker to buyer, department manager or store manager. In large stores, advance to administrative work in personnel or advertising. In small stores opportunities are limited. May also transfer to wholesale trade where his/her experience in a specific product line will enhance the likelihood of being hired.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: WHOLESALE TRADE SALES WORKER

DUTIES:

- Visits buyers for retail, industrial and commercial firms; also, for institutions such as schools and hospitals.
- Shows samples, pictures or catalogs of items his/her company stocks.
- Offers prompt, dependable service.
- Checks store's stock and orders items needed.
- May help store personnel improve and update system for ordering and inventory.
- Often advises retailers about advertising, pricing, and arranging window and counter displays.
- May give technical assistance on specialized products.
- Forwards orders to wholesale houses; prepares reports, expense accounts; plans work schedules; makes appointments. May collect money.
- May make shipping arrangements.

LANGUAGE SKILLS:

ENGLISH: Oral skills: conversing with a diversity of clientele in person, on the phone; describing products; providing technical assistance. Reading and writing skills: ordering items; report writing; preparing work schedules; filling out forms.

OTHER LANGUAGE: Oral skills: conversing with a diversity of clientele, sometimes from other countries (depending on business); telephone skills; arranging for shipping/transportation of product; describing products.

TRAINING REQUIREMENTS:

PRIOR: High school helpful. For certain specialized products technical training is required.

CONCURRENT: On-the-job training, to prepare trainees for outside selling.
TRAINING AVAILABILITY:

Large wholesale firms offer formal training combining classroom instruction with short rotations in various nonselling jobs. Trade associations sponsor training programs. Few colleges offer courses relevant to wholesale distribution. Vendors hold sessions to instruct sales people how best to sell a particular product line.

EARNINGS:

1980: average earnings:

beginning: $18,500 per year.
Lumber and building materials: $30,800 per year.
Plumbing and heating materials: $23,000 per year.

Earnings vary by experience and seniority as well as by product line. Many employers pay commission.

ADVANCEMENT OPPORTUNITIES:

Experienced sales workers with leadership qualities and sales ability may advance to supervisor, sales manager, or other executive positions.

INTERNATIONAL OPPORTUNITIES:

Depends on nature of business.
RETAIL AND WHOLESALE TRADE
CAREER PROGRESSION LADDER

Store Manager

Department Manager

Buyer

Asst. Buyer

* Cashier — * Retail and Wholesale Trade Sales Worker

*Job descriptions included in this chapter.*
### CHAPTER XVII
SOCIAL SERVICE OCCUPATIONS

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<tr>
<td>Prerequisites for job placement</td>
<td>351</td>
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<tr>
<td>Actual and projected employment figures</td>
<td>352</td>
</tr>
<tr>
<td>Listing of corporations/organizations</td>
<td>354</td>
</tr>
<tr>
<td>Job descriptions</td>
<td>357</td>
</tr>
<tr>
<td>Homemaker/Home Health Aide.</td>
<td>357</td>
</tr>
<tr>
<td>Social Service Aide</td>
<td>359</td>
</tr>
<tr>
<td>Employment (Vocational) Counselor</td>
<td>361</td>
</tr>
<tr>
<td>Career progression ladder</td>
<td>363</td>
</tr>
</tbody>
</table>
Prerequisites for Bilingual Vocational Training Project Development

Included in this chapter are job descriptions for three social service occupations. These are:

- Homemaker/Home Health Aide;
- Social Service Aide; and,
- Employment (Vocational) Counselor.

(Occupations such as Social Worker, Caseworker, and Rehabilitation Counselor were excluded from the report because the minimum educational requirement is a Bachelor's degree, and often a Master's degree.)

No educational requirements are needed to be employed as Homemaker/Home Health Aides. Training as a nurse's aide, however, may be required by some employers. In the past, bilingual vocational training programs have trained limited English-speaking adults in this occupation. Important English skills for English-as-a-second language teachers to focus on are assisting and instructing families in patient care and meal planning, telephone skills, and helping patients perform daily hygienic regimens.

For Social Service Aides, high school or the equivalent is helpful, but experience or training is not necessary. Providing the potential job applicant with skills in interviewing, explaining services and facilities to a client, and doing routine paperwork puts the individual in a much better position for being hired.

One common factor to all of the social service occupations is the need for the employee to have contacts in the community and to be able to have them as resources. Some of these positions also involve working with special groups, including the handicapped, women and minorities. Bilingual vocational training graduates who have had counseling and job placement experience understand the needs of these groups and speak languages other than English; these skills are very much needed.
Community and junior colleges and colleges and universities offer training in this occupation.

**Employment Projections**

All of the social service occupations are expected to experience employment growth in excess of the average for all occupations between now and 1990. The highest growth rates in this group of occupations are projected to occur among employment interviewers (nearly three times the average for all occupations), child-care attendants, welfare service aides and community organization workers (more than twice the average for all occupations).
<table>
<thead>
<tr>
<th>Job Title</th>
<th>Education</th>
<th>Training/Experience</th>
<th>Language Skills Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment (Vocational)</td>
<td>High school. States vary on need for higher level.</td>
<td>Experience in job placement may be required.</td>
<td>English: Same as Social Service Aide AND describing occupations; making referrals; contacting employers. Other Language: Same as Social Service Aide AND describing occupations; contacting community organizations.</td>
</tr>
<tr>
<td>Social Service Aide</td>
<td>High school helpful.</td>
<td>Work experience not necessary.</td>
<td>English: Explaining agency's services; helping applicants; interviewing and telephone skills. Other Language: Routine paperwork; filling out forms; updating files.</td>
</tr>
<tr>
<td>Homemaker/Home Health Aide</td>
<td>Courses in home economics helpful. Nurse aide training may be required by some employers.</td>
<td>Advising, assisting, instructing families in patient care, meal planning.</td>
<td>English: Advising, assisting, instructing families in patient care; meal planning. Other Language: Scheduling housekeeping duties for family members.</td>
</tr>
</tbody>
</table>

Job titles are listed in order of advancement. Further details are provided in the job descriptions for each job title. The career progression ladder includes additional job titles to show advancement opportunities.
Table 26

Employment in Social Services Occupations
Actual 1978 and Projected 1990*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1978</td>
<td>1990</td>
</tr>
<tr>
<td>ALL OCCUPATIONS COMBINED</td>
<td>97,610</td>
<td>102,347</td>
</tr>
<tr>
<td>PROFESSIONAL, TECHNICAL AND RELATED WORKERS</td>
<td>15,570</td>
<td>20,038</td>
</tr>
<tr>
<td>OTHER PROFESSIONAL AND TECHNICAL WORKERS</td>
<td>4,183</td>
<td>5,338</td>
</tr>
<tr>
<td>Caseworkers</td>
<td>236</td>
<td>338</td>
</tr>
<tr>
<td>Community Organization Workers</td>
<td>49</td>
<td>71</td>
</tr>
<tr>
<td>Employment Interviewers</td>
<td>51</td>
<td>86</td>
</tr>
<tr>
<td>CLERICAL WORKERS</td>
<td>17,820</td>
<td>22,219</td>
</tr>
</tbody>
</table>

*Employment projections are based on data from the U.S. Bureau of Labor Statistics. For each industry, employment in 1978 is shown, and three series of employment projections are shown for 1990: Low (L), Medium (M) and High (H). For comparison, projections also are shown (in capital letters) for all occupations combined and for the major occupational groups of which the occupations studied are a part. The projections are explained and additional detail is provided in Appendix A.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Eligibility Workers, Welfare</td>
<td>30</td>
<td>38</td>
</tr>
<tr>
<td>Personnel Clerks</td>
<td>90</td>
<td>111</td>
</tr>
<tr>
<td><strong>SERVICE WORKERS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>14,414</td>
<td>L: 18,946</td>
</tr>
<tr>
<td></td>
<td>1,547</td>
<td>L: 2,028</td>
</tr>
<tr>
<td>Child-Care Attendants</td>
<td>35</td>
<td>55</td>
</tr>
<tr>
<td>Child-Care Workers</td>
<td>398</td>
<td>581</td>
</tr>
<tr>
<td>Welfare Service Aides</td>
<td>84</td>
<td>126</td>
</tr>
<tr>
<td><strong>PRIVATE HOUSEHOLD WORKERS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1,160</td>
<td>L: 982</td>
</tr>
</tbody>
</table>
DATA SOURCES

- Chinatown Planning Council, NY
- Fairfax Hospital, VA
- Gouverneur Hospital, NY
- Northern Virginia Mental Health Center
- Travelers Aid Society, CA
- St. Mary's Hospital & Medical Center, CA

ADDITIONAL INFORMATION

- General information on employment or vocational counseling:
  - American Personnel & Guidance Association
    2 Skyline Place
    Suite 400
    5203 Leesburg Pike
    Falls Church, VA 22041
  - National Employment Counselors Association
    1607 New Hampshire Avenue, N.W.
    Washington, D.C. 20009

- Career opportunities:
  - National Association of Social Workers
    1425 H Street, N.W.
    Suite 600
    Southern Building
    Washington, D.C. 20005
  - National Council for Homemakers-Home Health Aide Services
    67 Irving Place
    6th Floor
    New York, NY 10003

- Publications on accredited social work programs:
  - Council on Social Work Education
    111 Eighth Avenue
    New York, NY 10017

- Information about job opportunities, entrance requirements:
  - State employment service

CORPORATION/AGENCY LISTING JOB OPPORTUNITIES

- Community School District 1
  New York, NY

- Long Beach Unified School District
  Long Beach, CA
<table>
<thead>
<tr>
<th>Organization</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>SFV Child Guidance Clinic</td>
<td>Northridge, CA</td>
</tr>
<tr>
<td>El Centro Community Mental Health Center</td>
<td>Los Angeles, CA</td>
</tr>
<tr>
<td>UCI Medical Center</td>
<td>Orange, CA</td>
</tr>
<tr>
<td>National Technical Schools</td>
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</tr>
<tr>
<td>Mirfax Association</td>
<td>Jakland, CA</td>
</tr>
<tr>
<td>LP/HFSED</td>
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</tr>
<tr>
<td>Onward House</td>
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</tr>
<tr>
<td>Community Service Organization</td>
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</tr>
<tr>
<td>Social Service Office</td>
<td>El Monte, CA</td>
</tr>
<tr>
<td>Counseling firm</td>
<td>Los Angeles, CA</td>
</tr>
<tr>
<td>Substance Abuse Clinic</td>
<td>Los Angeles, CA</td>
</tr>
<tr>
<td>Vocational Rehabilitation Office</td>
<td>Los Angeles, CA</td>
</tr>
<tr>
<td>Social Service Project</td>
<td>Los Angeles, CA</td>
</tr>
<tr>
<td>Social Service</td>
<td>Pasadena, CA</td>
</tr>
<tr>
<td>Family Planning Clinic</td>
<td>Chicago, IL</td>
</tr>
<tr>
<td>Employment Counseling Agency</td>
<td>Washington, D.C.</td>
</tr>
</tbody>
</table>

355 348
JOB TITLE: HOMEMAKER/HOME HEALTH AIDE

DUTIES:

- Advises and assists family members in planning nutritious meals, purchasing and preparing foods, and utilizing commodities from surplus food programs.
- Assists head of household in training and disciplining children; assigns and schedules housekeeping duties to children according to their capabilities.
- Provides emotional support and understanding.
- Explains fundamental hygiene principles and renders bedside care to individuals who are ill, and trains other family members to provide required care.
- Assists with bathing, helping the client move.
- Checks pulse and respiration, helps with simple exercises, assists with medication.
- Participates in evaluating needs of individuals served.

LANGUAGE SKILLS:

ENGLISH: Oral skills: helping client with daily personal care; explaining, advising about nutrition to family; training family to provide care to patient. Reading and writing skills: filling out forms; scheduling duties.

OTHER LANGUAGE: Oral skills: helping client with daily personal care; explaining, advising about nutrition to family; training family to provide care to patient.

TRAINING REQUIREMENTS:

PRIOR: High school not necessary. Courses in home economics helpful. Some employers require experience or previous training as a nurse aide. Physical exam usually required.

CONCURRENT: Orientation and on-the-job training. Usually, a 1-or-2 week training program. Continuing training by supervisors for specific assignments. Many agencies offer seminars, e.g., coping with depression, exercises for clients with heart conditions.

TRAINING AVAILABILITY:

Social service agencies; State and local training programs; private vocational/technical schools.
EARNINGS:

1978:

Beginning: $5,500 to $8,600 per year.

ADVANCEMENT OPPORTUNITIES:

Experienced aides can be promoted to special assistant to the supervisor.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: SOCIAL SERVICE AIDE (INCOME MAINTENANCE WORKER, CASEWORK AIDE, OUTREACH WORKER, EMPLOYMENT AIDE)

DUTIES:

- Explains services and facilities of agency.
- Helps applicants fill out required forms.
- Performs routine paperwork in welfare programs.
- Telephones other agencies for information and appointments.
- Updates clients records; maintains filing systems of reports.
- Fills out school enrollment, employment, medical and compensation forms.
- Interviews applicants to determine eligibility for help.
- May help clients obtain adequate housing, food stamps, medical care, job training.
- Offers encouragement and assistance to people in need of help in the community.
- May accompany clients to clinic to obtain medical care.
- Visits the applicant's home, interviews friends and relatives.
- Contacts the residents of an area to explain and discuss agency services.

LANGUAGE SKILLS:

ENGLISH: Oral skills: interviewing client, friends, family; telephone skills; explaining agency's service, facilities. Reading and writing skills: filling out forms; writing reports; updating records; maintaining filing system.

OTHER LANGUAGE: Oral skills: interviewing client, friends, family; telephone skills; explaining agency's services, facilities.

TRAINING REQUIREMENTS:

PRIOR: High school not required, but helpful depending on position. Level of entering occupation varies by educational background.
CONCURRENT: On-the-job training, classroom instruction.

TRAINING AVAILABILITY:
Community and junior colleges.

EARNINGS:
1978: No experience or formal education: $7,300 per year, average.

1979: Federal government:
Beginning: $9,391 per year.
Experienced: $13,014 per year.

ADVANCEMENT OPPORTUNITIES:
With additional training and work experience, to employment interviewer, counselor.

INTERNATIONAL OPPORTUNITIES:
Not applicable.
JOB TITLE: EMPLOYMENT COUNSELOR (VOCATIONAL COUNSELOR)

DUTIES:

- Interviews jobseekers to learn about their interests and abilities, education, training, work experience, work attitudes, personal traits.
- Provides people with career information and job finding skills.
- Arranges for aptitude and achievement tests.
- Contacts former employer or school principal of jobseekers.
- Identifies and describes suitable occupations, discusses client's employment prospects, occupational goals and alternatives.
- Refers clients to other agencies for additional help services and/or career and occupational information.
- May contact employers about jobs for applicants.
- Refers client with outdated job skills to a training program.
- May follow up on client after placement into a job or training program.
- Must be thoroughly familiar with community resources and services provided; must know eligibility requirements and referral procedures, identify and remain in contact with resource persons in other agencies.
- Keeps detailed records.

LANGUAGE SKILLS:

ENGLISH: Oral skills: interviewing a wide variety of clientele; telephone skills; contacting community organization representatives; describing occupations; discussing client's needs, goals, etc. Reading and writing skills: eligibility requirements; report writing; keeping records on clients; referral procedures.

OTHER LANGUAGE: Oral skills: interviewing a wide variety of clientele; telephone skills; contacting community organization representatives; describing occupation, discussing client's needs, goals, etc.

TRAINING REQUIREMENTS:

PR ... In public employment offices, must meet civil service or merit system requirements. Minimum education and experience vary widely by State. Some require
completion of high school. Others require a Master's degree in counseling or related field. Experience in job placement also may be required.

CONCURRENT: In-service training programs provided by each State employment service, and by many private and community agencies.

TRAINING AVAILABILITY:
State employment service, private and community agencies, colleges and universities.

EARNINGS:
Vary considerably from State to State.
1980: average minimum salary:
$13,900 to $18,000 per year, average.

ADVANCEMENT OPPORTUNITIES:
Experienced counselors may advance to supervisors, directors of agencies, area supervisors of guidance programs, research, consulting.

INTERNATIONAL OPPORTUNITIES:
Not applicable.
SOCIAL SERVICE
CAREER PROGRESSION LADDER

Area Supervisor
Social Service Program

Director

Professor
Asst. Director
Consultant

Supervisor

Special Asst. to Supervisor

Social Worker, MSW

Rehabilitation Counselor

*Employment Counselor

Caseworker
Social Worker, BSW

Employment Interviewer

Community Workers

Social Service Aide

Day Care* Homemaker/Home Health Aide

Aides and Assistants (Employment Aide)

*Job descriptions included in this chapter.
## CHAPTER XVIII
### TRANSPORTATION OCCUPATIONS

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</table>
TRANSPORTATION OCCUPATIONS

Prerequisites for Bilingual Vocational Training Project Development

Twelve job descriptions are presented in this chapter. These include positions in mass transportation authorities, such as bus and train operators, information transit personnel, and several supervisory positions; and, airline flight attendants. (Airline reservation and ticket agents are discussed in the next chapter, "Travel and Tourism Occupations.")

High school or the equivalent is preferred for all positions and required for some. This is a factor that must be taken into consideration when recruiting potential trainees. Training programs are offered by local transportation authorities and airlines. Local transit bus operator trainees are given classroom instruction and driving experience. They learn work rules, safety regulations, and safe driving practices. They also learn how to read bus schedules, keep records, and be tactful and courteous with passengers. Because high school is not required for bus drivers, bilingual vocational training programs could instruct trainees in some of these areas, enhancing their chances of obtaining employment.

Flight attendants learn how to react in an emergency: how to evacuate the plane, operate an oxygen system, and give first aid. In addition, they learn flight regulations and duties, company operations and policies, and passport and customs regulations for international flights. Flight attendants need to know how to deal with the public courteously and tactfully. Knowledge of languages other than English is required for personnel working on international airlines. Bilingual vocational training programs can prepare trainees in some of these subject areas to improve their chances of being accepted to the airlines.

Transit Information Clerks and Consumer Representatives respond to inquiries from the public, usually by phone, sometimes in writing. High school or the equivalent is required, along with keyboard and telephone
experience. Some of these skills can be taught in the vocational and English-as-a-second language classes.

Employment projections

The growth rate of employment of airline pilots and flight attendants to 1990 is expected to be higher than the growth rate of all occupations combined, while the rate of increase of employment of bus drivers is expected to only equal or perhaps lay behind overall employment growth.
<table>
<thead>
<tr>
<th>Job Title</th>
<th>Education</th>
<th>Training/Experience</th>
<th>Language Skills Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervisor, Consumer</td>
<td>High school. Some college desirable.</td>
<td>Training or experience in transportation occupations; knowledge of current routes, etc., Dept. of Transportation rules and regulations.</td>
<td>Oral: Supervising operators; responding to requests from the public. Other: None.</td>
</tr>
<tr>
<td>Information</td>
<td></td>
<td>Telephone and keyboard experience.</td>
<td>English: Answering customer inquiries; telephone skills. Other: Responding to customer inquiries.</td>
</tr>
<tr>
<td>Transit Information Clerk</td>
<td>High school.</td>
<td>Considerable telephone information experience and supervisory/administrative experience.</td>
<td>English: Hiring, training, supervising new clerks. Other: None.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maintenance logs, records, route books; ordering supplies; budget preparation.</td>
<td>English: Hiring, training, supervising new clerks. Other: None.</td>
</tr>
<tr>
<td>Street Supervisor</td>
<td>High school. Some college desirable.</td>
<td>Training or experience in transportation occupations; knowledge of current routes, etc., Dept. of Transportation rules and regulations.</td>
<td>Oral: Supervising operators; responding to requests from the public.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Telephone and keyboard experience.</td>
<td>English: Answering customer inquiries; telephone skills. Other: Responding to customer inquiries.</td>
</tr>
<tr>
<td>Bus Operator</td>
<td>High school or equivalent preference</td>
<td>Considerable telephone information experience and supervisory/administrative experience.</td>
<td>Oral: Hiring, training, supervising new clerks. Other: None.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maintaining logs, records, route books; ordering supplies; budget preparation.</td>
<td>English: Hiring, training, supervising new clerks. Other: None.</td>
</tr>
</tbody>
</table>

Job titles are listed in order of advancement. Further details are provided in the job descriptions for each job title. Additional job titles are included in the career progression ladder to show advancement opportunities.
Table 28
Employment in Transportation Occupations
Actual 1978 and Projected 1990*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1978</td>
<td>1990</td>
</tr>
<tr>
<td>ALL OCCUPATIONS COMBINED</td>
<td>97,610</td>
<td>14,205</td>
</tr>
<tr>
<td></td>
<td>L: 119,590</td>
<td>M: 121,447</td>
</tr>
<tr>
<td></td>
<td>H: 127,907</td>
<td></td>
</tr>
<tr>
<td>OPERATIVES</td>
<td>14,205</td>
<td>4,152</td>
</tr>
<tr>
<td></td>
<td>L: 16,399</td>
<td>M: 16,584</td>
</tr>
<tr>
<td></td>
<td>H: 17,697</td>
<td></td>
</tr>
<tr>
<td>TRANSPORT EQUIPMENT OPERATORS</td>
<td>3,468</td>
<td>4,152</td>
</tr>
<tr>
<td></td>
<td>L: 4,152</td>
<td>M: 4,140</td>
</tr>
<tr>
<td></td>
<td>H: 4,428</td>
<td></td>
</tr>
<tr>
<td>Bus Drivers</td>
<td>266</td>
<td>326</td>
</tr>
<tr>
<td></td>
<td>L: 326</td>
<td>M: 321</td>
</tr>
<tr>
<td></td>
<td>H: 329</td>
<td></td>
</tr>
<tr>
<td>Taxi Drivers</td>
<td>79</td>
<td>69</td>
</tr>
<tr>
<td></td>
<td>L: 69</td>
<td>M: 72</td>
</tr>
<tr>
<td></td>
<td>H: 78</td>
<td></td>
</tr>
<tr>
<td>PROFESSIONAL, TECHNICAL AND RELATED WORKERS</td>
<td>15,570</td>
<td>20,038</td>
</tr>
<tr>
<td></td>
<td>L: 20,038</td>
<td>M: 20,295</td>
</tr>
<tr>
<td></td>
<td>H: 21,119</td>
<td></td>
</tr>
<tr>
<td>TECHNICIANS, EXCLUDING HEALTH, SCIENCE AND</td>
<td>271</td>
<td>343</td>
</tr>
<tr>
<td>ENGINEERING</td>
<td>L: 343</td>
<td>M: 362</td>
</tr>
<tr>
<td></td>
<td>H: 347</td>
<td></td>
</tr>
</tbody>
</table>

*Employment projections are based on data from the U.S. Bureau of Labor Statistics. For each industry, employment in 1978 is shown, and three series of employment projections are shown for 1990: Low (L), Medium (M) and High (H). For comparison, projections also are shown (in capital letters) for all occupations combined and for the major occupational groups of which the occupations studied are a part. The projections are explained and additional detail is provided in Appendix A.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Airline Pilots</td>
<td>74</td>
<td>94</td>
</tr>
<tr>
<td>SERVICE WORKERS</td>
<td>14,414</td>
<td>18,946</td>
</tr>
<tr>
<td>SELECTED PERSONAL SERVICE WORKERS</td>
<td>1,547</td>
<td>2,028</td>
</tr>
<tr>
<td>Flight Attendants</td>
<td>51</td>
<td>64</td>
</tr>
</tbody>
</table>
DATA SOURCES

- Bay Area Rapid Transit, CA
- Pan Am Airlines, Washington, D.C.
- Washington Metropolitan Area Transit Authority
- Federal Aviation Administration, Washington, D.C.

ADDITIONAL INFORMATION

- Address of companies:
  --Air Transport Association of America
  1709 New York Avenue, N.W.
  Washington, D.C. 20006

- Unions to contact:
  --Amalgamated Transit Union
  --Transport Workers Union of America
  --United Transportation Union
  --International Brotherhood of Teamsters, Chauffeurs, Warehousemen and Helpers of America

- Employment opportunities:
  --Local transit system; airlines
  --State employment service
JOB TITLE: LOST AND FOUND CLERK

DUTIES:

- Responsible for the operation of the lost and found office—receiving, identifying, storing, safekeeping, and releasing all types of property.

- Maintains a complete record system and/or inventory and arranges for auction of unclaimed property. May pick up found property system-wide as required. Performs related duties as required.

- Receives, logs, and properly tags and stores property. Ensures that the security of stored property is maintained through periodic and daily inspection; has accountability for condition of storage facilities, equipment, locks and keys.

- Releases found property to owners or finders as authorized by statute and/or directive.

- Receives inquiries about lost property; logs such inquiries by major classification and cross references those entries to the found property logs.

- Routinely inspects property for owner identification; notifies owner and returns property. Checks serialized items through various automated property systems.

- Prepares unclaimed property for auction and participates in auction.

- May be required to submit a variety of narrative reports.

- Maintains storage areas in a clean and orderly condition.

- Lifts or moves heavy or bulky objects such as equipment, shelving, cartons and boxes.

- May operate hand trucks, ladders, typewriters, calculators, etc.

- Transports property as needed.

- Directly deals with the public when processing inquiries relative to Lost and Found property.

- Transfers found monies to the General Fund and prepares check requests.

LANGUAGE SKILLS:

ENGLISH: Oral skills: following and giving verbal directions; conversing with the public in a courteous and tactful manner; speaking clearly. Reading and
writing skills: following written directions; writing narrative reports; logging in and labelling property.

OTHER LANGUAGE: Oral skills: assisting public in a courteous and tactful manner; speaking clearly; giving directions; responding to inquiries.

TRAINING REQUIREMENTS:

PRIOR: High school or equivalent or 10 years of schooling and 2 years experience. Two years clerical experience including personal contact with the public, filing, telephone skills. Basic math skills.

CONCURRENT: On-the-job orientation to policies and procedures.

TRAINING AVAILABILITY:

In-house. Clerical training—vocational and technical schools, business schools, State and local government agencies.

EARNINGS:

starting: $10,000 to $13,600 per year, large urban area.

ADVANCEMENT OPPORTUNITIES:

With experience and additional training, to other clerical, secretarial and supervisory positions.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: FLIGHT ATTENDANT

DUTIES:

- Ensures that passenger cabin is in order.
- Checks that supplies, such as food, beverages, blankets, and reading material, are adequate, that first aid kits and emergency equipment are aboard.
- Greets passengers as they come aboard, checks their tickets, assists them in storing coats and small pieces of luggage.
- Before take-off, uses public address system to instruct passengers in the use of emergency equipment; checks to see that all passengers have their seat belts fastened.
- Answers questions about the flight; distributes magazines and pillows; helps care for small children, the elderly, and the handicapped.
- Gives first aid to ill passengers.
- Serves cocktails, other refreshments; may collect payment.
- May heat and distribute precooked meals.
- Assists passengers as they leave the plane.
- Prepares reports on medications given to passengers, lost and found articles, cabin equipment conditions.
- Assists passengers in an emergency, e.g., disabled engine, emergency landing.

LANGUAGE SKILLS:

ENGLISH: Oral skills: conversing with strangers; speaking clearly; determining problems; providing assistance; giving instructions in case of emergency. Reading and writing skills: report writing; safety language.

OTHER LANGUAGE: Oral skills: conversing with strangers; speaking clearly; determining problems; providing assistance; giving instructions in case of emergency. Fluency required for international airlines.
TRAINING REQUIREMENTS:

PRIOR: High school or equivalent required. Several years of college or experience in dealing with the public are preferred.

CONCURRENT: Intensive training, 4 to 6 weeks, in-house or to school of another airline. Includes how to react to emergencies, evacuating airplanes, operating an oxygen system, giving first aid, flight regulations and duties, company operations and policies. For international routes, courses in passport and customs regulations.

TRAINING AVAILABILITY:

Airline companies operate own schools or training centers

EARNINGS:

1980: average:

Beginning: $9,200-$10,800 per year.
International: $11,400-$12,600 per year.

ADVANCEMENT OPPORTUNITIES:

Limited. Experienced personnel get choice of bases and flights. May advance to flight service instructor, customer service director, instructor, recruiting representatives, other administrative positions.

INTERNATIONAL OPPORTUNITIES:

International airlines—generally require flight attendants to speak an appropriate language other than English fluently.
JOB TITLE: LOCAL TRANSIT BUS OPERATOR

DUTIES:

- Picks up and discharges passengers at scheduled stops on scheduled basis.
- Inspects general operating condition of vehicle before daily run.
- Responsible for reporting for work on a timely basis and for obtaining proper schedule to be operated.
- Provides transportation information to passengers.
- Responsible for collection of proper fares and issuing of transfers when required.
- Exercises reasonable care in the handling of funds and other valuables.
- Responsible for preparing accident and occurrence reports and reporting any problems or irregularities as necessary in accordance with established guidelines.
- Responsible for maintaining proper security for vehicle and its contents.
- May include, depending on employer:
  - Loading or assisting in loading hand-baggage as necessary.
  - Operating school bus runs separately or in conjunction with regular runs.
  - Collecting traffic data for use in traffic analysis.
  - Operating two-way radios or related equipment.
  - Performing charter bus work as appropriate and collecting and accounting for the assigned funds.

LANGUAGE SKILLS:

ENGLISH: Oral skills: provides transportation and fare information and assistance to passengers; operating two-way radios. Reading and writing skills: preparing accident reports; legibility.

OTHER LANGUAGE: Oral skills: providing transportation and fare information and assistance to passengers.
TRAINING REQUIREMENTS:

PRIOR: Minimum of two years current active experience in the operation of a motor vehicle and a minimum of twenty-one (21) years of age at the time of appointment.

CONCURRENT: On-the-job training. Most States require driver to have a chauffeur's license.

TRAINING AVAILABILITY:

In-house.

EARNINGS:

1980: average:

starting: $18,800 per year.

ADVANCEMENT OPPORTUNITIES:

To street supervisor, and then administrative positions.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: TRAIN OPERATOR

DUTIES:

On Mainline

- Monitors the train operation when in automatic mode.
- Operates train in manual mode when required and monitors the movement of passengers at station stops, overriding or manually operating doors if required.
- Makes necessary announcements to passengers over public address system.
- Carries out special instructions issued by Central Control and provides information and assistance to passengers, supervisors and other appropriate personnel.
- Exercises prudent and timely judgement in normal and emergency situations.

At Yard Areas

- Receives dispatching information from Yard Supervisor.
- Inspects trains.
- Makes up trains according to instructions.
- Operates trains to dispatching track.
- Performs pre-departure tests and actions and notifies Central Command of "train ready."
- Performs interlocking control functions as may be necessary.
- Performs prescribed transfer ATO/manual procedures when train is removed from service.
- Operates train by manual control to designated storage location.
- Shifts cars and trains within the yard and shop as instructed by the Yard Supervisor.
- Prepares defective vehicle, occurrence and other necessary reports.
- Assists in providing on-the-job instruction to new personnel.
• Provides first aid and/or requests medical assistance for ill or injured passengers.
• Participates in related training and equipment acceptance and testing programs as required.
• Makes minor equipment adjustments.

LANGUAGE SKILLS:

ENGLISH: Oral skills: assisting in training new employees; following instructions; aiding passengers; announcing over public address system. Reading and writing skills: following schedules.

OTHER LANGUAGE: Providing assistance to passengers.

TRAINING REQUIREMENTS:

PRIOR: High school or equivalent. A minimum of two years current and satisfactory driving experience. An equivalent combination of education and experience may be acceptable. One year full-time experience.

CONCURRENT: On-the-job training program.

TRAINING AVAILABILITY:

In-house transportation authorities.

EARNINGS:

$17,950 to $23,930 per year, large urban area.

ADVANCEMENT OPPORTUNITIES:

To station attendant, passenger station supervisor or rail transportation supervisor.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: TRANSIT INFORMATION CLERK

DUTIES:

- Operates telephone system to assist customers in obtaining optimum route information from origin to destination.

- Responds to telephone inquiries from the public regarding bus/rail schedules, service, fares and routes.

- Answers all customer inquiries regarding transit operations or refers the customer to the appropriate office or section.

- Records requests for bus/rail schedules and sends these to requesting customer, or forwards request to appropriate section.

- Maintains route books and maps and related materials and updates as necessary.

- Keeps the supervisors apprised of equipment malfunctions in order to expedite repairs.

- Performs related clerical duties.

LANGUAGE SKILLS:

ENGLISH: Oral skills: speaking clearly and distinctly; answering inquiries on telephone. Reading and writing skills: knowledge of grammar and spelling; maintaining, updating route books, maps; recording requests for schedules; mailing information.

OTHER LANGUAGE: Oral skills: speaking clearly and distinctly; answering questions on telephone.

TRAINING REQUIREMENTS:

PRIOR: High school or equivalent, with previous telephone and keyboard experience required. An equivalent combination of education and experience may be acceptable.

CONCURRENT: On-the-job training.

TRAINING AVAILABILITY:

In-house.
EARNINGS:

$12,906 to $16,130 per year, large urban area.

ADVANCEMENT OPPORTUNITIES:

To Transit Information Supervisor, or Supervisor, Consumer Information.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: STATION ATTENDANT OR AGENT

DUTIES:

- Monitors and performs station services.
- Assists passengers in use of station services and equipment.
- Provides assistance to public safety officials.
- Maintains visual observation of all public areas of the station, using CCTV equipment where required.
- Observes passenger flow through stations, being alert to unusual characteristics or patterns.
- Assists passengers in negotiating the stations/utilizing fare collection equipment.
- Makes announcements via the public address system to assist the public in the use of the transit system.
- Furnishes route information or such other assistance as may be required.
- Monitors the operation of escalators/elevators through the use of annunciator panels and monitors the status of all fire detection equipment throughout the station.
- Immediately reports to the Control Center or concerned office all unusual occurrences, i.e., vandalism, public disturbances, equipment malfunctions, etc.
- Completes written reports on all such occurrences.
- Provides assistance to public safety officials (fire, police and rescue) in the performance of their duties.
- Places fare collection equipment in/out service as equipment conditions/passenger load dictates.
- Operates reversible passenger gates as required by passenger load.
- Responds to problems indicated by fare collection machine status display.
- Overrides automatic gates opening signal if fire alarm does not require station evacuation.
- Overrides date/time rejection if farecards have been incorrectly coded under previous emergency conditions.
Permits pass holders to use service gates.

Collects and reports audit data when required.

Opens and closes station and other gates/accesses, manual or automatic starting, stopping, reversing of escalators/elevators along with the servicing of fare collection equipment.

Receives lost/found articles and turns in items in accordance with required procedure.

May be required to operate Authority motor vehicle.

**LANGUAGE SKILLS:**

**ENGLISH:** Oral skills: carrying out verbal instructions; speaking clearly and distinctly, with tact and courtesy, in providing information to passengers, explaining fare collection equipment, routing information, bus connections; public address system announcing. Reading and writing skills: reporting on unusual occurrences, audit data; filling out forms; carrying out written instructions.

**OTHER LANGUAGE:** Oral skills: speaking clearly and distinctly, with tact and courtesy, in providing information to passengers, explaining fare collection equipment.

**TRAINING REQUIREMENTS:**

**PRIOR:** High school or equivalent. Some college level training in behavioral science preferred. Work experience in public contact or related work. An equivalent combination of education and experience may be acceptable.

**CONCURRENT:** In-service training program, about 6 weeks. Ability to attain knowledge of the Authority's rapid rail transit system schedules, routing, bus connecting services and metropolitan area. Possession of a valid motor vehicle operator's license from state of residence.

**TRAINING AVAILABILITY:**

In-house.

**EARNINGS:**

During training: $16,286 per year, large urban area.
After training: $19,177 to $22,700 per year, large urban area.
ADVANCEMENT OPPORTUNITIES:

To passenger station supervisor, mid-management positions, rail operations.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: SUPERVISOR, PASSENGER STATIONS

DUTIES:

- Supervises the passenger station operation and on-the-job training of Station Attendants.
- Reports any neglect or infraction of rules by employees.
- Verifies and reports any exceptions to an employee's work program.
- Completes daily physical inspection of all assigned stations ascertaining that they are properly cleaned and maintained. Takes necessary corrective action as required for fulfillment of standards.
- Reports to specific stations in case of service disruptions and renders all possible assistance.
- May assist Station Attendants at high density passenger stations during peak hours.
- Enforces safety regulations throughout assigned areas.
- Settles disputes or difficulties arising out of fare payments, use of transfers, fare cards, etc.
- Discusses complaints and grievances with employees or their representatives.
- Evaluates and discusses performance of personnel recommending laudatory or disciplinary action as appropriate and equitable.
- May operate an Authority vehicle in the performance of duties.
- Completes necessary reports relative to station activities.

LANGUAGE SKILLS:

ENGLISH: Oral skills: supervising on-the-job training of employees; oral reports; assisting Station Attendants; discussing problems with employees. Reading and writing skills: report preparation; good vocabulary, spelling, grammar, punctuation.

OTHER LANGUAGE: Oral skills: supervising training of employees; assisting Station Attendants; discussing problems with employees.
TRAINING REQUIREMENTS:

PRIOR: High school or equivalent, preferably with some college training in transportation, management, human relations or related fields and with considerable previous experience in rail operations, including experience as a Station Attendant. Successful completion of the Authority's Assessment Center and successful Supervisory Promotability rating. Some previous supervisory experience preferred. An equivalent combination of education and experience may be acceptable.

Extensive knowledge of the Authority's rail/bus system including routes, fares and transfer points.

A working knowledge of electro-mechanical systems installed in stations.

CONCURRENT: On-the-job training.

TRAINING AVAILABILITY:

In-house. College courses.

EARNINGS:

$26,939 to $32,187 per year, large urban area.

ADVANCEMENT OPPORTUNITIES:

Administrative positions.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: RAIL TRANSPORTATION SUPERVISOR

DUTIES:

Main Line and Terminals

- Supervises Train Operators performing in Main Line/Terminal operations and ascertains that Train Operators are in correct uniform and in fit condition to perform their duties.

- Oversees the safe and efficient operation of trains within assigned area.

- Rides the front end of trains as often as possible for visual inspection of the right-of-way and to observe Train Operators' performance.

- Dispatches trains from terminals to meet scheduled requirements.

- Supervises the replacement of transit cars/trains arriving at a terminal/station with reported malfunctioning equipment.

- Coordinates with supervisor in charge of rail yard to ascertain that transit cars scheduled for inspection, cleaning or other maintenance are available at the time and place specified.

- Proceeds to, and assists at the scene of accidents, serious disruptions, emergencies or other unusual occurrences as governed by Command Center instructions. Checks Station Attendants reporting for dispatch at terminals as necessary to insure that they are in proper uniform and in fit condition to perform their duties.

- May operate an Authority vehicle as required.

Yard Operations

- Supervises Interlocking Attendants and Train Operators performing yard operations in the safe movement and storage of transit cars within division yard assigned.

- Supervises the make up of trains, insuring the timely availability of such trains for scheduled movement into revenue service.

- Insures that all transit cars scheduled for revenue service have received a daily diagnostic equipment test by Maintenance Department.

- Coordinates with Maintenance Department to facilitate the movement of transit cars to/from Inspection/Repair Shops and/or storage yard and the positioning of such cars in specified locations.
• Makes physical checks of yard and completes a detailed status report on all transit cars to include the maintenance of an up-to-date "car location map" of the yard indicating location and classification of each car.

• May be assigned to the Division Office to perform troubleshooting and other special assignments, etc.

• Additional duties may encompass interviewing/counseling of employees, recommending corrective action as necessary, preparation of operational or other reports as appropriate, monitoring and assisting in schedule picks, administering discipline and insuring that safe practices and procedures are followed in day-to-day activities.

• Develops and maintains liaison with all individuals and organizations with whom interface is required. Maintains a working knowledge of applicable collective bargaining agreements and other rules and regulations.

LANGUAGE SKILLS:

ENGLISH: Oral skills: supervising, interviewing, counseling employees; coordinating with other departments, supervisor; assisting in emergencies. Reading and writing skills: report preparation; maintaining current "car location map."

OTHER LANGUAGE: Oral skills: supervising, interviewing, counseling employees; assisting in emergencies.

TRAINING REQUIREMENTS:

Prior: High school or equivalent, preferably with completion of some college courses in transportation, management, business administration or related fields and successfully demonstrated experience as a Train Operator. Successful completion of the Authority's Assessment Center and some previous pertinent supervisory experience is desirable. An equivalent combination of education and experience may be acceptable.

Broad knowledge of the Authority's Rail System, including train, signal, electrical equipment, 3rd rail power sections, hand switches and related safety regulations.

CONCURRENT: On-the-job training.

TRAINING AVAILABILITY:

In-house. College courses.
EARNINGS:

$26,939 to $32,187 per year, large urban area.

ADVANCEMENT OPPORTUNITIES:

Managerial positions.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: STREET SUPERVISOR

DUTIES:

- Supervises the arrival/departure of buses at designated time points for maintenance of proper headway.
- May direct operators to change or extend runs if necessary, and request additional vehicles for special or emergency situations.
- Determines replacement of defective vehicles.
- Observes and reports on Operators' performance.
- Suspends operators from duty in necessary cases of accident involvement or for other major rule infractions that could result in an unsatisfactory situation.
- Expedites operations by assisting with passenger loading.
- Replies to requests for information from public as to routes, schedules, transfer points, and fares; settles disputes or difficulties arising out of fare payments, use of transfers, etc.
- Observes road conditions, requesting assistance as needed.
- Discusses schedules, problems with operators, and recommends corrections as required.
- Evaluates Operator's appearance in conformance with established rules and regulations and takes appropriate action as may be necessary to correct the situation.
- Operates Authority vehicles in a safe manner and maintains adequate inventory of emergency supplies on vehicle.
- May make minor repairs to buses to retain vehicles in safe operating condition.

LANGUAGE SKILLS:

ENGLISH: Oral skills: giving directions to drivers; requesting assistance; answering questions from public; providing information; discussing schedules, problems with workers. Reading and writing skills: repair manuals; report writing.

OTHER LANGUAGE: Oral skills: giving directions, information to the public; answering questions.
TRAINING REQUIREMENTS:

PRIOR: High school or equivalent with extensive experience in bus transportation work and preferably with previous experience or training as an Operator, Training and Safety Instructor, Supervisor-Dispatcher, Depot Clerk or Utility Clerk. Some college training desirable. An equivalent combination of education and experience may be acceptable.

Extensive knowledge of current routes, fares and transfer points.

Thorough knowledge of Department of Transportation rules and regulations, of the mechanical operation of each model bus in service, of Labor-Management Agreements.

CONCURRENT: On-the-job training.

TRAINING AVAILABILITY:

In-house. College courses.

EARNINGS:

$26,939 to $32,187 per year, large urban area.

ADVANCEMENT OPPORTUNITIES:

Managerial positions.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: CONSUMER REPRESENTATIVE

DUTIES:

- Receives personal telephone or written inquiries from consumers concerning comments, complaints, commendations relative to service, facilities, personnel or suggestions for improvement of service.
- Prepares as necessary acknowledgment of written inquiries.
- Prepares and maintains log of activities regarding the patterns, trends and the magnitude of such comments.
- Develops priority of inquiries and takes appropriate action to ensure a timely response to each.
- Investigates, follows up and responds to those inquiries within the scope of responsibility, including the typing of all correspondence involved.
- Prepares and routes as necessary those inquiries requiring action and/or comment by other departments. Follows up these internal requests for comment and/or action on a scheduled basis.
- Reviews comments by operating elements to ensure that inquiries have been adequately and appropriately handled. If necessary, contacts appropriate office for additional information.
- Develops and maintains a general understanding and knowledge of all areas of potential consumer comments as well as developing an in-depth expertise with specifically assigned offices.
- Provides assistance to other staff members as required.

LANGUAGE SKILLS:

ENGLISH: Oral skills: responding to personal or telephone inquiries from consumers; assisting other staff members. Reading and writing skills: writing letters to respond to inquiries; reviewing comments.

OTHER LANGUAGE: Oral skills: responding to personal or telephone inquiries from consumers; assisting other staff members. Reading and writing skills: writing letters to respond to inquiries.

TRAINING REQUIREMENTS:

PRIOR: High school or equivalent. Previous experience, preferably in transit operations with exposure as a bus
operator or other positions providing consumer contact. An equivalent combination of education and experience may be acceptable. Ability to type.

CONCURRENT: On-the-job training--policies and procedures of transportation authority.

TRAINING AVAILABILITY:

In-house.

EARNINGS:

starting: $20,724 to $27,735 per year, urban area.

ADVANCEMENT OPPORTUNITIES:

To Supervisor, consumer assistance; mid-management, marketing positions.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: TRANSIT INFORMATION CLERK SUPERVISOR

DUTIES:

- Supervises and evaluates the performance of the Transit Information Clerks.
- Responds to difficult customer inquiries or requests which cannot be handled by the clerks.
- Provides assistance to clerks experiencing difficulty with the automated equipment, and may perform tasks related to its operation.
- Transmits advisory messages from a master console to be displayed on each console screen.
- Monitors and operates the Automated Call Distribution Control terminal to determine workload and generate management information to assess and adjust personnel assignments, telephone call assignment and incoming telephone call distribution.
- Follows the specific procedures established to diagnose and correct certain routine Automated Information Directory System (AIDS) problems as necessary. Starts up and shuts down system as required.
- Instructs Transit Information Clerks on the proper use of the automated equipment, the manual back-up system and other aspects of the section's operations.
- Evaluates complaints/grievances with employees in accordance with established employee relations practices. Recommends and initiates laudatory and/or disciplinary action as justified and equitable.
- Prepares and maintains required reports. Maintains and updates route books as necessary.
- May be called upon to act in the absence of the section supervisor.

LANGUAGE SKILLS:

ENGLISH: Oral skills: supervising clerks; responding to difficult customer inquiries or requests; assisting clerks; telephone skills. Reading and writing skills: preparing, maintaining reports; updating route books.

OTHER LANGUAGE: Oral skills: responding to difficult customer inquiries or requests; assisting clerks; telephone skills.
TRAINING REQUIREMENTS:

PRIOR: High school or equivalent, with considerable administrative or telephone information experience. An equivalent combination of education and experience may be acceptable.

CONCURRENT: On-the-job training.

TRAINING AVAILABILITY:

In-house.

EARNINGS:

$17,429 to $21,509 per year, large urban area.

ADVANCEMENT OPPORTUNITIES:

To Supervisor (Transit or Consumer Information).

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: SUPERVISOR (TRANSIT OR CONSUMER INFORMATION)

DUTIES:

- Oversees the orientation and training of new Information Clerks and trains new Transit Information Clerk Supervisors.
- Attends to all administrative matters including supplies, equipment and manpower.
- Maintains the payroll records, schedules the work shifts, interviews and approves the hiring of new employees and is responsible for employee evaluation and discipline.
- Responsible for making certain that all telephone and other equipment is maintained in working condition.
- Responsible for insuring that all logs, records, or books of bus routes, route changes, incoming complaints and general information on bus operation are orderly and maintained on a current basis.
- Reviews the performance of the Transit Information Supervisors and may review the performance of the Information Clerks through reports from the Information Supervisors.
- Responsible for evaluating the quality of the service provided by the unit and to take steps to improve the quality of the service, when needed.
- Prepares budget and manpower projections.
- Develops and maintains liaison with operating personnel and their activities where necessary to carry out responsibilities.

LANGUAGE SKILLS:

ENGLISH: Oral skills: overseeing orientation and training of new clerks; interviewing, hiring new employees.
Reading and writing skills: budget preparation; manpower projections preparation; record keeping; ordering supplies.

OTHER LANGUAGE: Oral skills: overseeing orientation and training of new clerks; hiring new employees.

TRAINING REQUIREMENTS:

PRIOR: High school, considerable PBX, telephone information or related experience with successfully demonstrated relevant supervisory and administrative
experience. An equivalent combination of education and experience may be acceptable.

CONCURRENT: On-the-job training.

TRAINING AVAILABILITY:

In-house.

EARNINGS:

$23,288 to $31,116 per year, large urban area.

ADVANCEMENT OPPORTUNITIES:

Administrative positions.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
TRANSPORTATION
CAREER PROGRESSION LADDER

Marketing

* Supervisor, Consumer Information

* Supervisor, Consumer Assistance

Mid-Management Positions, Bus Operations

Mid-Management Positions, Rail Operations

* Transit Information Clerk Supervisor

* Merchandise Representative

* Street Supervisor

* Passenger Station Supervisor

* Rail Transportation Supervisor

* Station Attendants

* Bus Operators

* Train Operators

* Transit Information Clerk

* Job descriptions included in this chapter.
# CHAPTER XIX

## TRAVEL AND TOURISM OCCUPATIONS

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TrAVEL AND TOURISM OCCUPATIONS

Prerequisites for Bilingual Vocational Training Project Development

Job descriptions for six occupations are included in this chapter. These are:

- Airline Reservation Agent;
- Airline Ticket Agent;
- Park Aide/Technician;
- Tour Guide;
- Travel Agent; and,
- Park Ranger.

For the two park occupations, high school or the equivalent is required, along with some experience in park operations. There has been a recent upsurge in hiring park personnel, especially from the local communities. Bilingual vocational training administrators can keep track of both local and State park trends. Similar to Tour Guides, Park Aides/Technicians and Rangers can lead groups of visitors, providing descriptions and park information.

Travel and reservation agents work for airlines and other transportation companies. High school generally is required. Agents need to know how to read schedules, book customer reservations, answer customer inquiries on the phone and in person, plan itineraries, and use a computer terminal by typing instructions on the keyboard. These workers are trained on the job.

Tour guides are often self-employed and may not always work full-time. Knowledge of languages other than English is extremely useful for tour groups of foreign visitors and for accompanying groups overseas. Tour guides usually work in large metropolitan areas or where there are historic monuments and museums.
Employment projections

The demand for travel agents and accommodations appraisers is expected to increase sharply during the 1980's. The number of jobs in this occupation is projected to increase by more than 50 percent—a rate of increase more than twice as high as the average for all occupations. The number of jobs for ticket agents, however, will increase only slightly over the present number.
<table>
<thead>
<tr>
<th>Job Title</th>
<th>Education/Training/Experience</th>
<th>Language Skills Required</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><strong>English</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Other Language</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Oral</strong></td>
</tr>
<tr>
<td>Park Ranger</td>
<td>High school AND 3 yrs. experience in park or conservation work OR</td>
<td>Supervising employees; speaking to visitors, community organizations.</td>
</tr>
<tr>
<td>Park Technician</td>
<td>High school or equivalent. Experience in park operations OR Civil Service examination.</td>
<td>Leading tours; giving talks to visitors.</td>
</tr>
</tbody>
</table>

Job titles are listed in order of advancement. Further details are provided in the job descriptions for each job title. Additional job titles are included in the career progression ladder to show advancement opportunities.
<table>
<thead>
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<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>1978</td>
<td>1990</td>
</tr>
<tr>
<td>ALL OCCUPATIONS COMBINED</td>
<td>97,610</td>
<td></td>
</tr>
<tr>
<td></td>
<td>+22.5</td>
<td>+24.4</td>
</tr>
<tr>
<td>PROFESSIONAL, TECHNICAL AND RELATED WORKERS</td>
<td>15,570</td>
<td></td>
</tr>
<tr>
<td></td>
<td>L: 20,038</td>
<td>M: 20,295</td>
</tr>
<tr>
<td></td>
<td>+28.7</td>
<td>+30.3</td>
</tr>
<tr>
<td>OTHER PROFESSIONAL AND TECHNICAL WORKERS</td>
<td>4,183</td>
<td></td>
</tr>
<tr>
<td></td>
<td>L: 5,338</td>
<td>M: 5,457</td>
</tr>
<tr>
<td></td>
<td>+27.6</td>
<td>+30.5</td>
</tr>
<tr>
<td>Travel Agents and Accommodations Appraisers</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td></td>
<td>L: 70</td>
<td>M: 70</td>
</tr>
<tr>
<td></td>
<td>+55.6</td>
<td>+56.1</td>
</tr>
<tr>
<td>CLERICAL WORKERS</td>
<td>17,820</td>
<td></td>
</tr>
<tr>
<td></td>
<td>L: 22,219</td>
<td>M: 22,519</td>
</tr>
<tr>
<td></td>
<td>+24.7</td>
<td>+26.4</td>
</tr>
<tr>
<td>Ticket Agents</td>
<td>49</td>
<td></td>
</tr>
<tr>
<td></td>
<td>L: 51</td>
<td>M: 51</td>
</tr>
<tr>
<td></td>
<td>+3.8</td>
<td>+3.8</td>
</tr>
</tbody>
</table>

*Employment projections are based on data from the U.S. Bureau of Labor Statistics. For each industry, employment in 1978 is shown, and three series of employment projections are shown for 1990: Low (L), Medium (M) and High (H). For comparison, projections also are shown (in capital letters) for all occupations combined and for the major occupational groups of which the occupations studied are a part. The projections are explained and additional detail is provided in Appendix A.
TRAVEL AND TOURISM OCCUPATIONS
LISTING OF CORPORATIONS/ORGANIZATIONS

DATA SOURCES

- Guide Service of Washington, D.C.
- National Park Service, CA
- New York Visitors and Convention Center

ADDITIONAL INFORMATION

- Travel Agent:
  --Training opportunities:
    - American Society of Travel Agents
      711 5th Avenue
      New York, NY 10022
  --Reservation and ticket agents:
    --Pamphlet describing job duties:
    - Air Line Employees Association
      5600 S. Central Avenue
      Chicago, IL 60638
  --Employment opportunities in a particular airline:
    --List of companies:
    - Air Transport Association of America
      1709 New York Avenue, N.W.
      Washington, D.C. 20006

CORPORATION/AGENCY LISTING JOB OPPORTUNITIES

- China Overseas Travel Service Agency
- OC Tours Corporation
- United Airlines
- Viajes Fiestas
- 20th Century Travel
- Emerald International Travel, Inc.
- Inca Travel Service
- Van Tours Travel, Inc.
- Travel Agency

LOCATION

New York, NY
New York, NY
New York, NY
Washington, D.C.
Washington, D.C.
Washington, D.C.
Washington, D.C.
West Covina, CA
JOB TITLE: AIRLINE RESERVATION AGENT

DUTIES:

- Makes and confirms reservations for passengers on scheduled airline flights, using timetables, airline manuals, reference guides, and tariff book.
- Answers customer telephone inquiries regarding late arrivals and departures, fares, schedules, and cities serviced by the airline.
- Types requested flight number on keyboard of on-line computer reservation system, scans screen to determine space availability.
- May suggest an alternate flight if no space is available.
- Types customer's name and other information into computer to reserve space on flight.
- Can change or cancel reservations at customer's request by modifying the record on the computer.

LANGUAGE SKILLS:

ENGLISH: Oral skills: conversational telephone skills with the public, determining where customer wants to go, when, from which airport customer wants to leave. Reading and writing skills: obtaining information from computer, changing or cancelling reservations.

OTHER LANGUAGE: Oral skills: conversational telephone skills with the public, finding out where customer wants to go, when, from which airport customer wants to leave.

TRAINING REQUIREMENTS:

PRIOR: High school or equivalent generally is required. Work experience with the public is desirable. Typing skills, basic math skills.

CONCURRENT: On-the-job training—-one month of classroom instruction including company policy, government regulations covering ticketing procedures, reading schedules, calculating fares, planning itineraries, using computer, followed by several weeks working under supervisors or experienced agents.

TRAINING AVAILABILITY:

Community and junior colleges, business schools offer courses in office procedures, typing. Individual airlines offer on-the-job training.
EARNINGS:

1980 survey: $17,600 per year, average.

ADVANCEMENT OPPORTUNITIES:

Limited. May be promoted to supervisory positions, city and district sales managers for ticket offices.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: AIRLINE TICKET AGENT

DUTIES:

- Books space on flights for customers.
- Compiles and records information to assemble airline tickets for transmittal or mailing to customers.
- Reads coded data on booking card to ascertain destination, carrier, flight number, type of accommodation, and stopovers enroute.
- Selects ticket blank, invoice, and customer account card (if applicable).
- Compiles, computes, and records identification and fare data, using tariff manuals, rate tables, flight schedules, and pen or ticket imprinter.
- Separates and files copies of completed tickets.
- Clips completed tickets and invoices to booking cards and reroutes to other workers for Teletype transmittal or mails tickets to customers.
- Computes total daily fares, using adding machine, to compile daily revenue report.
- Keeps records of passengers on each plane, assists customers with problems such as lost or damaged baggage.
- May tag passenger's luggage for shipment on the plane.
- Helps passengers board planes.
- May use public address system to announce boarding gates and times.
- At the gate, collects tickets, issues boarding passes, sometimes assigns seats.
- Checks to make sure flight attendants have all the equipment needed for the flight.
- May provide information on ground transportation and local hotels when passengers are disembarking.

LANGUAGE SKILLS:

ENGLISH: Oral skills: conversational ability with the public in person (at airports, downtown ticket offices); assisting passengers with problems; providing
information; announcing boarding gates and times. 

Reading and writing skills: filling out tickets; record keeping; compiling information from various written sources, e.g., manuals, schedules.

OTHER LANGUAGE: Oral skills: conversational ability with the public in person; assisting passengers with problems; providing information; announcing boarding gates and times (in international airports, certain locations).

TRAINING REQUIREMENTS:

PRIOR: High school or equivalent generally required. Work experience dealing with the public desirable. Basic math skills.

CONCURRENT: On-the-job training— one week of classroom instruction (how to tag bags, read tickets and schedules, assign seats) followed by one week of working under an experienced agent.

TRAINING AVAILABILITY:

Community and junior colleges, business schools offer courses in office procedures, typing; individual airlines offer on-the-job training.

EARNINGS:

1980 survey: $19,300 per year, average.

ADVANCEMENT OPPORTUNITIES:

Limited. May be promoted to supervisory positions, city and district sales managers for ticket offices.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: PARK AIDE/TECHNICIAN

DUTIES:

- Works on plant and insect control projects, soil conservation teams and fire fighting crews.
- Carries out plans to preserve and restore buildings and sites.
- Operates campgrounds.
- Leads guided tours and gives talks to groups of visitors.
- May direct traffic, join road patrols, operate radio dispatch stations.

LANGUAGE SKILLS:

ENGLISH: Oral skills: leading tours; giving talks to visitors; directing traffic; operating radio dispatch stations. Reading and writing skills: operating campgrounds.

OTHER LANGUAGE: Oral skills: leading tours; giving talks to visitors; operating radio dispatch stations.

TRAINING REQUIREMENTS:

PRIOR: High school or equivalent. Civil Service examination or some experience in park operations.

CONCURRENT: On-the-job training.

TRAINING AVAILABILITY:

In-house by Park Service.

EARNINGS:

Vary by type of Park (State, Federal, municipal).

ADVANCEMENT OPPORTUNITIES:

To Park Ranger.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
JOB TITLE: TOUR GUIDE

DUTIES:

- Responsible for motor coach.
- Describes sites, historic landmarks to group of tourists.
- Accompanies group to museums, tourist attractions; describes features, collections, etc.
- Answers questions from group members.
- May travel from country to country with group--will make arrangements for lodging and prepare itineraries, travel, obtain passports, visas, recommend and accompany group to restaurants, solve travelers' problems.

LANGUAGE SKILLS:

ENGLISH: Oral skills: describing parts of a city or country, sites, landmarks; narrating prepared text; telephone skills. Reading and writing skills: preparing itineraries, problem solving.

OTHER LANGUAGE: Oral skills: describing parts of a city or country, sites, landmarks; narrating prepared text; interpreting questions; telephone skills. Reading and writing: problem solving (in other countries).

TRAINING REQUIREMENTS:

PRIOR: 100-hour training course (e.g., 10 weeks, 2 days/week). Familiarity with the city (or country). Residence requirements vary by city--about 2 years. Successful completion of an oral examination in a language other than English.

CONCURRENT: Successful completion of an information examination required to obtain a license (annual renewal required).

TRAINING AVAILABILITY:

In-house.

EARNINGS:

Usually work as independent, self-employed contractors on an hourly basis--$7.00 to $12.00 per hour, large urban area.
ADVANCEMENT OPPORTUNITIES:

Limited. To office staff who book tours, teach tour guide course.

INTERNATIONAL OPPORTUNITIES:

Accompanying tour groups overseas, acting as guide through several countries.
JOB TITLE: TRAVEL AGENT

DUTIES:

- Plans itineraries, arranges accommodations and other travel services for customers of travel agency.

- Converses with customer to determine destination, mode of transportation, travel dates, financial considerations, and accommodations required.

- Plans or describes and sells itinerary package tour.

- Gives customer brochures and publications concerning local customs, points of interest, and special events; foreign country regulations, e.g., consular requirements, rates of monetary exchange, currency limitations.

- Computes cost of travel and accommodations, using calculating machine, carrier toll books, and hotel rate books.

- Books customer on transportation carrier and makes hotel reservations, using telephone or teletypewriter.

- Writes or obtains travel tickets for transportation or tour and collects payment.

- May include, depending on place of employment:
  - Specializing in foreign or domestic service, individual or group travel, specific geographic area, airplane charters, or package tours by bus.
  - Acting as wholesaler and assembling tour packages.
  - Visiting different hotels, resorts, and restaurants to rate their comfort, cleanliness, and quality of food and service.
  - Giving slide or movie presentations to social and special interest groups, arranging advertising displays, meeting with business managers to suggest company-sponsored trips.

LANGUAGE SKILLS:

ENGLISH: Oral skills: conversing with customers, telephone skills, ability to work with a large variety of people. Reading and writing skills: filling out forms, itineraries.

OTHER LANGUAGE: Oral skills: conversing with customers, telephone skills, discussing a foreign city or country in another language to some customers, planning and organizing tours for foreign visitors. Enhances chances of accompanying tour groups overseas.
TRAINING REQUIREMENTS:

PRIOR: Courses in geography, foreign languages, history, computer science most useful. Experience as an airline reservation agent good background. College sometimes preferred. Courses in accounting and business management important for those planning to start own agencies.

CONCURRENT: On-the-job training, formal or informal. No Federal licensing requirements; some States (Rhode Island, Ohio, and Hawaii) require travel agents to have a license.

TRAINING AVAILABILITY:

In-house for on-the-job training. Some home-study courses of travel industry are available. Travel courses offered in vocational schools, adult education programs in public high schools, community colleges, colleges. Institute of Certified Travel Agents offers an advanced course for experienced travel agents; completion leads to the designation of certified Travel Counselor. Certificate of proficiency from American Society of Travel Agents upon completion of five tests.

EARNINGS:

1980:

$9,600 to $18,000 per year, average.

Earnings depend on experience, sales ability, size and location of the agency.

Self-employed agents' earnings primarily depend on commissions, varying from 8 to 10 percent, and some nominal service fees.

ADVANCEMENT OPPORTUNITIES:

With experience, certification, many travel agents start own agency. Need to obtain formal conference approval to begin receiving commissions. (Conferences are organizations of airlines, shiplines, or rail lines. To gain approval, agency must: be in operation, be financially sound, and employ at least one experienced travel agent)

INTERNATIONAL OPPORTUNITIES:

May accompany tour groups overseas, appraise accommodations and restaurants.
JOB TITLE: PARK RANGER

DUTIES:

- Plans and carries out conservation efforts.
- Plans and conducts programs of public safety.
- Sets up and directs slide show, guided tours, displays and dramatic presentations.
- Coordinates environmental education programs.
- Works on recreation activity planning, conservation programs, park organization, financial management.
- May supervise other employees.
- Speaks to groups of visitors.
- Meets with civic groups and community organizations.

LANGUAGE SKILLS:

ENGLISH: Oral skills: directing, speaking to groups of visitors; supervising employees; meeting with civic programs. Reading and writing skills: planning public safety programs.

OTHER LANGUAGES: Oral skills: directing, speaking to groups of visitors; meeting with community organizations; conducting public safety programs.

TRAINING REQUIREMENTS:

PRIOR: High school, three years of experience in park or conservation work. Four year course in college or university leading to bachelor's degree. Any equivalent combination of education and experience.

CONCURRENT: On-the-job training.

TRAINING AVAILABILITY:

In-house by Park Service.

EARNINGS:

$12,854 to $16,706 per year, Federal level.
ADVANCEMENT OPPORTUNITIES:

Advance to District Rangers, Park Managers and staff specialists.

INTERNATIONAL OPPORTUNITIES:

Not applicable.
TRAVEL AND TOURISM
CAREER PROGRESSION LADDER

Director
Visitors Center

Director,
Information Center

Asst. Director,
Information Center

Information Counselor  * Tour Guide

District Ranger

Supervisory Park Ranger

* Park Ranger

* Park Technician

* Park Aide

*Job descriptions included in this chapter.
APPENDIX A

EMPLOYMENT TRENDS
BY OCCUPATION AND INDUSTRY
APPENDIX A

EMPLOYMENT TRENDS BY OCCUPATION AND INDUSTRY

INTRODUCTION

This appendix contains discussions of the expected future demand for labor in the occupations in which a language other than English is an asset and in the industries in which many of those occupations are concentrated. These discussions are based on the latest update of economic projections made by the U.S. Bureau of Labor Statistics (BLS). All of the projections of employment in 1990 in the various occupations shown in the tables in the text are drawn from the BLS projections. The projections shown in this report are for civilian employment at the national level. Through cooperation with BLS, projections are prepared for States and in some cases, the larger labor market areas within the States. These subnational projections adjust the national projections for local conditions. Interested readers may determine the availability of State and labor market area projections based on the latest BLS data by contacting either the State Employment Security Agency (SESA) or the State Occupation Information Coordinating Committee (SOICC) in their respective States.

PROJECTION METHODOLOGY

In simplified terms, the BLS methodology for estimating future employment by occupation is as follows. Changes in employment in any occupation result from two sources: (1) growth and (2) replacement. Growth (or decline) arises from increased (or decreased) demand for an industry's products or services and the pattern of employment for each occupation in the industry. Replacements are needed because of attrition from the work force attributable to deaths and retirements.

BLS occupational employment projections, thus, start with estimating future changes in the output of each industry and its total employment. The industry's total employment is then allocated to the various occupations involved. Finally, additional workers needed are determined by estimating deaths and retirements based on specific death and age rates for the different occupations.

As in any set of projections, various assumptions underly the BLS estimates. Changes in any of a very large number of factors (for example, governmental fiscal policies, labor productivity, retirement practices, to name a few) would, of course, change the projected numbers. In view of the large number of factors and the uncertainty involved, BLS prepares three sets of projections based on three different sets of assumptions.

*The latest projections are presented in a series of four articles published in the August 1981 issue of the Monthly Labor Review. These articles also contain discussions of the methodology of BLS projections.
The three scenarios represented by the three sets of projections are referred to by BLS as (1) low-trend, (2) high-trend I, and (3) high-trend II. The low-trend assumes that the rate of labor force expansion will decline, and that there will be modest increases in production and labor productivity until 1990. The two high-trend scenarios are based on the assumption of large increases in production, but high-trend II assumes increases in labor productivity sufficient to dampen growth in employment relative to high-trend I. The results of the three scenarios are such that employment projections of high-trend II are usually, but not always, modestly greater than the low-trend. The high-trend I projections usually are considerably greater than either of the other two series. Although the three sets of projections do not correspond exactly to high, medium and low scenarios, these designations are used for convenience in the tables in the earlier chapters on each occupation studied. The designations are as follows:

- Low (L) = BLS Low-Trend
- Medium (M) = BLS High-Trend II
- High (H) = BLS High-Trend I

Exceptions to the low-medium-high ordering are minor. For one occupation—Sales Managers, Retail Trade—the medium and low projections are identical, while for two occupations—Order Clerks and Parking Attendants—the medium projections exceed the high ones. In 8 other occupations the low projections exceed slightly the medium projections: Insurance Clerks (medical), Bus Drivers, Recreation Facility Attendants, Dental Assistants, Medical Assistants, Surgical Technicians, X-Ray Technicians, and Ambulance Drivers and Attendants.

PROJECTED INDUSTRY EMPLOYMENT*

Some of the occupations for which it has been determined that a language other than English is an asset (for example, health care and food service) are tied closely to the future of specific industries. Others (for example, office occupations) will benefit from growth in a number of industries. This section contains highlights of projected employment changes in various industries, with emphasis on those in which there are concentrations of occupations in which a language other than English is an asset. This information is a useful supplement to the other information in this report which deals with occupations. Overall employment growth in an industry suggests more advancement opportunities than in a stagnant industry, even in the absence of precise definition of career ladders, which were not possible to determine in all cases.

Table 31 on the following page shows projected rates of annual employment changes for 15 selected industries over the period 1979-1990. These industries are selected because they are readily identifiable as major employers of persons in the occupations in which a language other

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**TABLE 31**

**SELECTED INDUSTRIES WITH CONCENTRATIONS OF OCCUPATIONS IN WHICH A LANGUAGE OTHER THAN ENGLISH IS AN ASSET, RANKED BY EXPECTED AVERAGE ANNUAL RATE OF CHANGE IN EMPLOYMENT, 1979-1990**

<table>
<thead>
<tr>
<th>Industry (Concentrated Occupations)</th>
<th>Projected Annual Rate of Change (in percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low-Trend (L)</td>
</tr>
<tr>
<td>Other Medical Services (Health, Nursing)</td>
<td>+4.6</td>
</tr>
<tr>
<td>Hospitals (Health, Nursing)</td>
<td>+3.8</td>
</tr>
<tr>
<td>Doctors' and Dentists' Services (Health, Nursing)</td>
<td>+3.4</td>
</tr>
<tr>
<td>Local Government Passenger Transit (Transportation)</td>
<td>+3.3</td>
</tr>
<tr>
<td>Eating and Drinking Places (Food Services)</td>
<td>+3.0</td>
</tr>
<tr>
<td>Radio and Television Broadcasting (Communications)</td>
<td>+3.0</td>
</tr>
<tr>
<td>Banking (Banking, Office)</td>
<td>+2.6</td>
</tr>
<tr>
<td>Credit Agencies and Financial Brokers (Banking, Office)</td>
<td>+2.5</td>
</tr>
<tr>
<td>Hotels and Lodging Places (Hotel)</td>
<td>+1.8</td>
</tr>
<tr>
<td>Insurance (Office)</td>
<td>+1.7</td>
</tr>
<tr>
<td>Average-All Industries Combined</td>
<td>+1.4</td>
</tr>
<tr>
<td>Local Transit and Intercity Buses (Transportation)</td>
<td>+1.4</td>
</tr>
<tr>
<td>Wholesale Trade (Trade)</td>
<td>+1.3</td>
</tr>
<tr>
<td>Retail Trade, except eating and drinking places (Trade)</td>
<td>+1.3</td>
</tr>
<tr>
<td>Communications, except radio and television (Communications)</td>
<td>+1.2</td>
</tr>
<tr>
<td>Air Transportation (Transportation)</td>
<td>+1.0</td>
</tr>
</tbody>
</table>

than English is an asset. (Many of these occupations are, of course, found in other industries.) Employment in 10 of these 15 industries is projected to grow at a rate higher than the average for all industries, while the remaining five are only slightly below that average.

The first industry listed in Table 31--Other Medical Services--is projected to be the fastest growing industry during the next decade of the 150 industries studied by BLS. Moreover, each of the six industries in Table 31 projected to grow by at least 3.0 percent annually according to the low-trend are among the 12 fastest growing industries identified by BLS.

Although rate of growth of employment is a reliable indicator of increased labor demand, another important indicator is the number of jobs to be gained by the various industries. The industries which are expected to have the largest gains of employment include both modest size industries with high growth rates and large industries with modest growth rates. The following 10 industries are expected to have the largest absolute employment gains to 1990, according to BLS:

<table>
<thead>
<tr>
<th>Employment Gain</th>
</tr>
</thead>
<tbody>
<tr>
<td>1979-1990</td>
</tr>
</tbody>
</table>

*Eating and drinking places* 1,912,000  
*Retail trade, except eating and drinking places* 1,878,000  
*Hospitals* 1,711,000  
*Miscellaneous business services* 909,000  
*Other medical services* 892,000  
*New construction* 866,000  
*Wholesale trade* 580,000  
*Doctors' and dentists' services* 490,000  
*Banking* 416,000  
*Educational services (private)*

Seven of the 10 industries with the highest expected employment gains (those marked with an asterisk) are also among the industries shown in Table 31 which have high concentrations of occupations in which a language other than English is an asset.

FUTURE OCCUPATIONAL EMPLOYMENT*

Projected growth of occupations in which a language other than English is an asset is shown in the series of tables presented earlier in this report. Most of the occupations in which a language other than English is an asset are white-collar or service occupations, and few are in the

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The fastest growing group over the next decade will be service workers, excluding private household workers (an increase of 35.5 percent on the low-trend projection). As is the case with expected industry growth, medical service workers will be among the highest growth occupations.

White-collar occupations are expected to show an employment increase of 24.9 percent according to the low trend projection. Professional and technical workers, including many health workers, will increase at the highest rate among white-collar occupations (28.7 percent). The number of clerical workers will increase by 24.7 percent, and salesworkers by 24.4 percent. Managers and administrators are expected to show an increase in employment of 19.1 percent. Blue-collar workers—including craft workers, operatives and nonfarm laborers—will have an increase in employment of 18.6 percent.

Table 32 shows the 20 most rapidly growing occupations of the 340 occupations for which BLS has prepared projections. Eight of these 20 occupations are among those in which a language other than English is an asset.

The 20 occupations which are expected to add the most jobs over the coming decade are shown in Table 33. Fourteen of these 20 occupations are among those in which a language other than English is an asset.
### TABLE 32

**Fastest Growing Occupations**  
1978-1990, Low-Trend Projection

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Percent Growth in Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Processing Machine Mechanics</td>
<td>147.6</td>
</tr>
<tr>
<td>Paralegal Personnel</td>
<td>132.4</td>
</tr>
<tr>
<td>Computer Systems Analysts</td>
<td>107.8</td>
</tr>
<tr>
<td>Computer Operators</td>
<td>87.9</td>
</tr>
<tr>
<td>Office Machine and Cash Register Servicers</td>
<td>80.8</td>
</tr>
<tr>
<td>Computer Programmers</td>
<td>73.6</td>
</tr>
<tr>
<td>Aero-Astronautic Engineers</td>
<td>70.4</td>
</tr>
<tr>
<td><em>Food Preparation and Service Workers, Fast Food Restaurants</em></td>
<td>68.8</td>
</tr>
<tr>
<td>*Employment Interviewers</td>
<td>66.6</td>
</tr>
<tr>
<td>Tax Preparers</td>
<td>64.5</td>
</tr>
<tr>
<td>Correction Officials and Jailers</td>
<td>60.3</td>
</tr>
<tr>
<td>Architects</td>
<td>60.2</td>
</tr>
<tr>
<td>*Dental Hygienists</td>
<td>57.9</td>
</tr>
<tr>
<td>*Physical Therapists</td>
<td>57.6</td>
</tr>
<tr>
<td>*Dental Assistants</td>
<td>57.5</td>
</tr>
<tr>
<td>Peripheral EDP Equipment Operators</td>
<td>57.3</td>
</tr>
<tr>
<td>*Child-Care Attendants</td>
<td>56.3</td>
</tr>
<tr>
<td>Veterinarians</td>
<td>56.1</td>
</tr>
<tr>
<td>*Travel Agents and Accommodations Appraisers</td>
<td>55.6</td>
</tr>
<tr>
<td>*Nurses' Aides and Orderlies</td>
<td>54.6</td>
</tr>
</tbody>
</table>

*Identified in this report as occupations in which a language other than English is an asset.

**TABLE 33**

Detailed Occupations With Largest Expected Numbers of New Jobs, 1978-1990, Low-Trend Projection

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Growth in Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Janitors and Sextons</td>
<td>671,200</td>
</tr>
<tr>
<td>*Nurses' Aides and Orderlies</td>
<td>594,000</td>
</tr>
<tr>
<td>*Sales Clerks</td>
<td>590,700</td>
</tr>
<tr>
<td>*Cashiers</td>
<td>545,500</td>
</tr>
<tr>
<td>*Waiters/Waitresses</td>
<td>531,900</td>
</tr>
<tr>
<td>*General Clerks, Office</td>
<td>529,800</td>
</tr>
<tr>
<td>*Professional Nurses</td>
<td>515,800</td>
</tr>
<tr>
<td>*Food Preparation and Service Workers, Fast Food Restaurants</td>
<td>491,900</td>
</tr>
<tr>
<td>*Secretaries</td>
<td>487,800</td>
</tr>
<tr>
<td>Truckdrivers</td>
<td>437,600</td>
</tr>
<tr>
<td>*Kitchen Helpers</td>
<td>300,600</td>
</tr>
<tr>
<td>Elementary Schoolteachers</td>
<td>272,800</td>
</tr>
<tr>
<td>*Typists</td>
<td>262,100</td>
</tr>
<tr>
<td>Accountants and Auditors</td>
<td>254,200</td>
</tr>
<tr>
<td>Helpers, Trades</td>
<td>232,500</td>
</tr>
<tr>
<td>Blue-Collar Worker Supervisors</td>
<td>221,100</td>
</tr>
<tr>
<td>*Bookkeepers, Hand</td>
<td>219,700</td>
</tr>
<tr>
<td>*Licensed Practical Nurses</td>
<td>215,600</td>
</tr>
<tr>
<td>*Guards and Doorkeepers</td>
<td>209,900</td>
</tr>
<tr>
<td>Automotive Mechanics</td>
<td>205,300</td>
</tr>
</tbody>
</table>

*Identified in this report as occupations in which a language other than English is an asset.

APPENDIX B

ALPHABETICAL INDEX OF JOB TITLES
### APPENDIX B

**ALPHABETICAL INDEX OF JOB TITLES**

<table>
<thead>
<tr>
<th>JOB TITLE</th>
<th>OCCUPATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airline Reservation Agent</td>
<td>Travel and Tourism</td>
</tr>
<tr>
<td>Airline Ticket Agent</td>
<td>Travel and Tourism</td>
</tr>
<tr>
<td>Ambulatory Care Technician</td>
<td>Health Care</td>
</tr>
<tr>
<td>Announcers, Radio and Television</td>
<td>Media</td>
</tr>
<tr>
<td>Assistant Bio-Medical Equipment Technician</td>
<td>Health Care</td>
</tr>
<tr>
<td>Assistant Branch Manager</td>
<td>Banking</td>
</tr>
<tr>
<td>Assistant Manager of Building Services (Building Supervisor)</td>
<td>Building Maintenance and Construction</td>
</tr>
<tr>
<td>Bank Clerk</td>
<td>Banking</td>
</tr>
<tr>
<td>Bank Teller</td>
<td>Banking</td>
</tr>
<tr>
<td>Bartender and Bartender's Helper</td>
<td>Food Service</td>
</tr>
<tr>
<td>Bell Captain</td>
<td>Hotel</td>
</tr>
<tr>
<td>Bellhop (Bellman)</td>
<td>Hotel</td>
</tr>
<tr>
<td>Bio-Medical Equipment Technician</td>
<td>Health Care</td>
</tr>
<tr>
<td>Bookkeeper</td>
<td>Office</td>
</tr>
<tr>
<td>Broadcast Technician</td>
<td>Media</td>
</tr>
<tr>
<td>Building Custodian</td>
<td>Building Maintenance and Construction</td>
</tr>
<tr>
<td>Captain (Head Waiter/Waitress; Assistant Maitre d'Hôtel)</td>
<td>Food Service</td>
</tr>
<tr>
<td>Cashier</td>
<td>Retail and Wholesale Trade</td>
</tr>
<tr>
<td>Certified Occupational Therapy Assistant</td>
<td>Rehabilitation and Therapy</td>
</tr>
<tr>
<td>Certified Physical Therapist Assistant</td>
<td>Rehabilitation and Therapy</td>
</tr>
<tr>
<td>Claim Representative (Claim Adjuster/Examiner)</td>
<td>Office</td>
</tr>
<tr>
<td>Collection Worker</td>
<td>Office</td>
</tr>
<tr>
<td>Community Affairs Officer</td>
<td>Protective Services/Correction</td>
</tr>
<tr>
<td>Community Information Aide</td>
<td>Recreation</td>
</tr>
<tr>
<td>Consumer Representative</td>
<td>Transportation</td>
</tr>
<tr>
<td>Cook</td>
<td>Food Service</td>
</tr>
<tr>
<td>Cook, Head (Head Chef)</td>
<td>Food Service</td>
</tr>
<tr>
<td>Cook's Helper (Pantry Person)</td>
<td></td>
</tr>
<tr>
<td>JOB TITLE</td>
<td>OCCUPATION</td>
</tr>
<tr>
<td>---------------------------------------------------------</td>
<td>--------------------------------------------------------------</td>
</tr>
<tr>
<td>Correction Officer</td>
<td>Protective Services/Correction</td>
</tr>
<tr>
<td>Correctional Sergeant</td>
<td>Protective Services/Correction</td>
</tr>
<tr>
<td>Customer Service Representative</td>
<td>Banking</td>
</tr>
<tr>
<td>Dental Assistant</td>
<td>Health Care</td>
</tr>
<tr>
<td>Dental Hygienist</td>
<td>Health Care</td>
</tr>
<tr>
<td>Detective</td>
<td>Protective Services/Correction</td>
</tr>
<tr>
<td>Dietary Aide (Kitchen Helper)</td>
<td>Food Service</td>
</tr>
<tr>
<td>Electrocardiograph (EKG) Technician</td>
<td>Health Care</td>
</tr>
<tr>
<td>Electroencephalographic (EEG) Technician</td>
<td>Health Care</td>
</tr>
<tr>
<td>Electroencephalographic (EEG) Technologist</td>
<td>Health Care</td>
</tr>
<tr>
<td>Emergency Medical Technician, Paramedic</td>
<td>Health Care</td>
</tr>
<tr>
<td>Employment Counselor (Vocational Counselor)</td>
<td>Social Service</td>
</tr>
<tr>
<td>File Clerk</td>
<td>Office</td>
</tr>
<tr>
<td>Firefighter</td>
<td>Protective Services/Correction</td>
</tr>
<tr>
<td>Flight Attendant</td>
<td>Transportation</td>
</tr>
<tr>
<td>Food Counter Worker</td>
<td>Food Service</td>
</tr>
<tr>
<td>Full Service Teller</td>
<td>Banking</td>
</tr>
<tr>
<td>Guard</td>
<td>Protective Services/Correction</td>
</tr>
<tr>
<td>Head Nurse</td>
<td>Nursing</td>
</tr>
<tr>
<td>Homemaker/Home Health Aide</td>
<td>Social Service</td>
</tr>
<tr>
<td>Hospital Care Investigator</td>
<td>Health Care</td>
</tr>
<tr>
<td>Host/Hostess</td>
<td>Food Service</td>
</tr>
<tr>
<td>Hotel Front Office Clerk (Receptionist, Cashier)</td>
<td>Hotel</td>
</tr>
<tr>
<td>Hotel Housekeeper and Assistant</td>
<td>Hotel</td>
</tr>
<tr>
<td>Hotel Manager and Assistant</td>
<td>Food Service</td>
</tr>
<tr>
<td>Institutional Aide</td>
<td>Hotel</td>
</tr>
<tr>
<td>International Representative</td>
<td>Food Service</td>
</tr>
<tr>
<td>Kitchen Helper</td>
<td>Nursing</td>
</tr>
<tr>
<td>Licensed Practical (Vocational) Nurse (LPN, LVN)</td>
<td>Transportation</td>
</tr>
<tr>
<td>Local Transit Bus Operator</td>
<td>Building Maintenance and Construction</td>
</tr>
<tr>
<td>Lost and Found Clerk</td>
<td></td>
</tr>
<tr>
<td>Maintenance Worker</td>
<td></td>
</tr>
<tr>
<td>JOB TITLE</td>
<td>OCCUPATION</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>Medical Assistant</td>
<td>Health Care</td>
</tr>
<tr>
<td>Mental Health Assistant</td>
<td>Health Care</td>
</tr>
<tr>
<td>Medical Record Clerk</td>
<td>Health Care</td>
</tr>
<tr>
<td>Medical Record Technician</td>
<td>Health Care</td>
</tr>
<tr>
<td>Nurse-Midwife</td>
<td>Nursing</td>
</tr>
<tr>
<td>Nurse’Aide (Hospital Attendant, Nursing Assistant)</td>
<td>Health Care</td>
</tr>
<tr>
<td>Office Manager</td>
<td>Office</td>
</tr>
<tr>
<td>Operating Room (Surgical) Technician</td>
<td>Health Care</td>
</tr>
<tr>
<td>Optometric Assistant (Paraoptometric)</td>
<td>Health Care</td>
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<td>Orderly Transport Escort</td>
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<td>Orthoptist</td>
<td>Health Care</td>
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<tr>
<td>Park Aide/Technician</td>
<td>Travel and Tourism</td>
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<tr>
<td>Park Ranger</td>
<td>Travel and Tourism</td>
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<tr>
<td>Physician Assistant (PA) (MEDEX; Physician Associate, Community Health</td>
<td>Protective Services/Correction</td>
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<tr>
<td>Medic)</td>
<td>Protective Services/Correction</td>
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<tr>
<td>Police Dispatcher (Police Administrative Aide)</td>
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<td>Police Officer</td>
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<td>Rail Transportation Supervisor</td>
<td>Recreation</td>
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<td>Media</td>
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<td>Registered Nurse</td>
<td>Rehabilitation and Therapy</td>
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<tr>
<td>Reporter, Radio, Television, Newspaper</td>
<td>Retail and Wholesale Trade</td>
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<tr>
<td>Respiratory (Inhalation) Therapy Technician and Therapist</td>
<td>Banking</td>
</tr>
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<td>Retail Trade Sales Worker</td>
<td>Office</td>
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<td>Safety Deposit Supervisor</td>
<td>Health Care</td>
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<td>Secretary</td>
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<td>Senior Bio-Medical Equipment Technician</td>
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<tr>
<td>Senior Hospital Care Investigator</td>
<td>Health Care</td>
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<tr>
<td>Senior X-Ray Technician</td>
<td>Health Care</td>
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<tr>
<td>Social Service Aide (Income Maintenance Worker, Casework Aide, Outreach</td>
<td>Social Service</td>
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<td>Worker, Employment Aide)</td>
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439 423
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<th>JOB TITLE</th>
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<tr>
<td>State Police Officer</td>
<td>Protective Services/Correction</td>
</tr>
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<td>Station Attendant or Agent</td>
<td>Transportation</td>
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<tr>
<td>Stenographer</td>
<td>Office</td>
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<tr>
<td>Steward (Set-Up Worker)</td>
<td>Food Service</td>
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<td>Street Supervisor</td>
<td>Transportation</td>
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<td>Supervising Medical Records Librarian</td>
<td>Health Care</td>
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<td>Supervisor of Food Service Personnel</td>
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<tr>
<td>Supervisor, Passenger-Stations</td>
<td>Transportation</td>
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<td>Supervisor (Transit or Consumer Information)</td>
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</tr>
<tr>
<td>Telephone Operator (PBX Operator)</td>
<td>Office</td>
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<td>Tour Guide</td>
<td>Travel and Tourism</td>
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<td>Train Operator</td>
<td>Transportation</td>
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<tr>
<td>Transit Information Clerk</td>
<td>Transportation</td>
</tr>
<tr>
<td>Transit Information Clerk Supervisor</td>
<td>Transportation</td>
</tr>
<tr>
<td>Travel Agent</td>
<td>Travel and Tourism</td>
</tr>
<tr>
<td>Typist</td>
<td>Office</td>
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<td>Waiter/Waitress</td>
<td>Food Service</td>
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<td>Waiter's Assistant</td>
<td>Food Service</td>
</tr>
<tr>
<td>Wholesale Trade Sales Worker</td>
<td>Retail and Wholesale Trade</td>
</tr>
<tr>
<td>X-Ray (Radiologic) Technologist (Radiographer)</td>
<td>Health Care</td>
</tr>
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Overview

An extensive review of the literature was conducted while developing the occupational categories and this report. This included reviewing one thousand documents from: (a) agencies involved in the foreign language field, (b) the Library of Congress' general reference files, (c) professional journals, (d) college and university language houses, (e) professional organizations, and (f) Federal agencies. In conjunction with these sources of information, we also obtained two computer searches from the National Institute of Education's Education Reference Center, and one computer search from the Library of Congress' Hispanic Division. The two Education Reference Center searches included 918 citations for the first search, and an additional 100 citations were obtained from the second search. From the Library of Congress' Hispanic Division, we obtained another 289 citations.

No references were found to be directly relevant to the usefulness of languages other than English and non-professional careers for limited English speakers. Materials focused on languages as a second language that were being learned by native English speakers. The underlying assumption was a great degree of proficiency in all skill areas in both languages (oral/aural, reading/writing) and completion of a bachelor's degree. Therefore, the bibliography includes references that are relevant to bilingual vocational training programs in a variety of ways. That is, the materials provide information useful to enhancing bilingual vocational training programs that is not directly related to the use of languages other than English on the job.

The bibliography is divided into six sections, each section containing references pertaining to a particular substantive topical area. These areas are: (a) foreign languages and occupational opportunities; (b) minority group problems, concerns, and interests; (c) specific occupational references; (d) career/vocational education and foreign language opportunities; (e) foreign language education and learning; and, (f) bilingual education/bilingual vocational training. We feel that each reference included, regardless of topical area, contains either in toto, or in part, some information that would be important and beneficial for bilingual vocational training program administrators, educators and job placement/employment counselors.

To further assist readers, we have cross-referenced those books and articles that address more than one of the five topical areas. The code used is:

- A Foreign languages and occupational opportunities;
- B Minority group problems, concerns, and interests;
• C Specific occupational references;
• D Career/Vocational education and foreign language opportunities;
• E Foreign language education and learning; and,
• F Bilingual education/bilingual vocational training.
Foreign languages and occupational opportunities


This article reports on a study conducted by foreign language educators in Kansas in 1974 to determine the possibilities for the practical application of foreign language skills in Kansas businesses.


A study entitled "Languages for the world of work", sponsored by the State of Wyoming, was performed by Olympus Research Corporation. The four phases of the project—search of the literature, analysis of employment opportunities, a model for proposed curricula, and dissemination of results—are described.


This paper concerns languages for career training at the post-secondary level, with implications for FLES and secondary programs. The student desirous of utilizing a foreign language in a career other than literature and linguistics has very limited opportunity for adequate training in college. The job market for literature majors is, and will remain, depressed. A study by Olympus Research Corporation indicates promising job possibilities in government and industry. Needs analysis indicates that priority languages for business and industry are: (a) Spanish, (b) French, (c) German, (d) Portuguese, and (e) Italian. Cross-training is in demand for: (a) business administration/management, (b) marketing/sales, (c) engineering, (d) secretarial, and (e) finance. Various government positions also require language skills. Colleges must break with tradition to accept languages for non-humanities applications. Language Departments must team with other academic specialties to provide relevant programs, with priority assigned according to job demand and local resources. Non-academic resources in government,
business and industry should be utilized in implementing such cooperative cross-training in language and other disciplines.


This article reports on a survey to determine the demand for foreign language skills in business in Illinois, to define the characteristics of foreign language use by Illinois business firms, and to determine the foreign language skills being developed in Illinois primary and secondary schools, and colleges.

Arnold, Edwin P. and Willingham, Russell. Vocational Opportunities in Foreign Languages. Clemson, South Carolina: Clemson University, Department of Languages, 1975.

This is a compilation of books, pamphlets, articles and bulletins dealing with vocational opportunities for people with foreign language skills. The paper is divided into twelve sections with the following contents: (a) an annotated outline of various fields in business and industry, vocations and professions and Federal government departments where foreign language skills may be an asset, (b) bibliography of selected books, pamphlets, articles and information sheets on business firms recommending foreign language study, (c) letters from business firms recommending foreign language study, (d) incidental articles, (e) Clemson University placement bulletins, (f) South Carolina State Development Board information on foreign firms, (g) pamphlets from business operations of foreign firms in South Carolina, and (h) schools and universities with programs emphasizing foreign languages as an auxiliary skill.


A largely qualitative analysis of the supply and demand for foreign language and international specialists and of the use to which their skills are put in the private and public sectors was undertaken. The investigation was based on a review of the literature in the field and on more than 150 interviews with representatives of four main groups that affect supply and demand for specialists: (a) universities and other training institutions, (b) private business, (c) Federal, state, and international agencies, and (d) foundations and other nonprofit organizations.
The goal of the study was to provide a President's Commission on Foreign Language and International Studies with a description of the present and expected trends affecting training in these skills and the uses to which they are put with suggestions for future research, and with a discussion, without recommendations, of some of the main policy issues. An interview guide, a list of groups interviewed, a delineation of supply and demand variables used in the study, and a selected bibliography are appended.


This bibliography of career and vocational education related resources is designed for use by secondary and postsecondary counselors, vocational instructors, and English-as-a-second language teachers working with limited English proficiency students. The bibliography is divided into five sections beginning with a section which contains materials for career exploration and pre-employment skill development. Section 2 lists vocational training materials which can be used as basic texts or as supplementary bilingual resources. Also included are materials which provide curriculum guides and task analyses of various occupations. The third section identifies materials designed to facilitate the development of language related to the world of work. It includes vocational English tests, technical dictionaries/glossaries and other second-language tools. Section 4 lists professional reference readings covering topics such as cross-cultural counseling, bilingual vocational training, vocational English-as-a-second language, and minorities in the labor market. The final section provides the titles of bibliographies of additional resources including assessment instruments. The bibliography concludes with a listing of publishers and distributors.


The author discusses the importance of knowledge of a foreign language as related to a variety of career opportunities. He cites the reasons for this, especially as related to the international scope of American business and government.

The book is divided into two parts: (a) careers in which a foreign language is needed as a complement to other technical skills, and (b) careers in which knowledge of the foreign language is the primary skill.
Bourgoin lists a large variety of positions, the types and places of work, and the languages needed for business, industry and commerce in general. He gives a random selection of newspaper advertisements as an indication of the wide range of positions in which a foreign language is needed. He also cites the large number of Federal agencies which have overseas positions and provides a good general description with occupational qualifications, including the requisite language skills. Also provided are agency addresses to which one may write for further information and job applications. Although local government is mentioned as a possible source of employment for bilingual personnel, only a general need is cited. The possibilities of employment with international organizations are also discussed; some job titles are given. A variety of other occupations are discussed in which knowledge of a foreign language is desirable, including education, library science, physical and social sciences, law, media, travel and tourism, and service occupations.

Occupations in which a foreign language is the primary skill required include: foreign language teaching, interpreting and translating. Although a college degree and certification are required for teachers, "noncertified personnel can be employed as teachers of foreign languages in elementary schools if they are native speakers of the language." Bourgoin also notes that commercial language schools usually prefer to hire native speakers as teachers.

The book provides an excellent overview of the job opportunities available for individuals with foreign language competencies. Many of the occupations discussed have as a minimum requirement a college degree, along with technical specialized knowledge. Occupations pertinent to this study are also included, however. Detailed job descriptions, advancement opportunities, training availability, and manpower trends are not included for each occupation.


A conference was convened as a forum for second language educators to exchange ideas on the second language needs of international business. This report includes a transcription of the discussions that took place as well as several brief papers describing locally used methods of language assessment and an innovative program. A consensus of the conference consists in the recognition that business and industry have great need of second language skilled professionals, a need that has not been met in part because the education of a technologist, businessman, or engineer has never included foreign language study as an integral element. The traditional method of "tacking on" a few
hours of language instruction to meet an immediate need is recognized as inadequate. Among the alternatives proposed are: (a) promoting as a norm lengthy, and costly, language training for employees selected on the basis of professional expertise and demonstrated language aptitude, and (b) encouraging business to offer incentives for students to maintain language study throughout their schooling.


This report discusses the effectiveness of current programs and personnel policies in Federal agencies with respect to foreign language needs. Overall, the United States has about 16,700 Federal positions requiring language skills. The General Accounting Office found that the foreign language competence of American personnel abroad is less than adequate for maximum effectiveness and efficiency, though some agencies are better than others. This inadequacy is attributed to the fact that the system for defining foreign language skill requirements is insufficient or nonexistent, and improvements are needed in foreign language assignments and in training policy and procedure. Low foreign language proficiency limits job performance, but efforts by Federal agencies to meet language needs are hampered by: (a) inadequate planning which places insufficiently skilled people in language-related positions, (b) inadequate language training, (c) unforeseen turnover in these language related positions, and (d) the fact that second language skill is only one of many capabilities an employee needs. Recommendations are given to help improve personnel policies and practices, language training programs, and the process for determining foreign language requirements.


Discusses the job situation as it is at the present time for speakers of Russian and suggests ways in which increased trade activity between the United States and the Soviet Union will result in more job opportunities in the future.
Students of foreign languages insist on seeing the evidence that foreign language skills have something to do with getting jobs in the "real world." Evidence is being amassed which does show this to be true. Several studies have revealed that American firms are looking for qualified personnel who possess language skills. A survey was initiated at the University of South Carolina in order to ascertain the State's needs for people with foreign language competencies and to compare these needs with the foreign language competency of the graduates of the State's educational establishment. The Modern Language Association did a nationwide survey of business and industry which resulted in a valuable document supplying comprehensive evidence of the need for foreign languages as an auxiliary skill in American business, industry, and commerce. Researchers at the University of Texas published a report based upon returns from a questionnaire sent to over one thousand corporations doing a significant amount of international business. A British study carried out at the University of York gives information on the situation in England. These studies tell us that foreign language skills can be important, even crucial in some cases, in successful job hunting. But subject area expertise is more important to the employer than foreign language knowledge. Educators in foreign languages need a good public relations campaign to document the demand for foreign language skills and knowledge of foreign cultures and to demonstrate their ability to supply the kind of language and cultural competence which is being called for.

This discussion on one of the ways that competence in a foreign language may be valuable to Americans in the future deals with the value of competence as an adjunct skill in a wide variety of work at home and abroad. Three major points are made: (a) only real competence in a foreign language, rather than credits on transcripts, will have value in the years to come, (b) with the exception of a very few jobs, few employment opportunities will be available to translators and interpreters and these few will require knowledge of a specialized field, and (c) on the other hand, there are predictions that there will be interesting opportunities for employment for those who have real foreign language competence and a sound training in a specialized field. Predictions for the eighties are made on the basis of three recently published major analytical and prognostic reports. Consequences of the changes to come for instruction in American
schools and colleges are discussed. The focus of the report is on the role of foreign languages in international business.


The author describes the linguistic skill areas and the level of "linguistic accomplishment" as it relates to the levels needed in different occupations. Occupations are grouped and presented in terms of those in which language skills are secondary qualifications, and those in which knowledge of at least two languages is of primary importance for job performance. The first category delineates twenty-two occupational categories (e.g., abstracting, airline personnel, broadcasting, publishing). It is noted that the number of positions available is limited for several of these job categories. A brief discussion of each category provides general information on job titles or positions, requisite English and foreign language skills, and types of employers.

Careers in which knowledge of at least two languages is of primary importance for job performance are discussed in detail (i.e., teaching a foreign language, translating and interpreting). Included are the job duties, the knowledge base needed, the types of organizations in need of personnel with bilingual skills, as well as the various "human and personality traits" essential for successful job performance.

Finlay also presents information directed toward the English-speaking student learning another language (e.g., What languages should I study? Where can I study? and language examinations), none of which are relevant to the population being served by the bilingual vocational training projects to which this report is directed. "Prospects Linguistic Careers" provides earnings information for the three "primary language" careers in Great Britain only.


This ten-page booklet provides a general assessment of the job situation for people who know foreign languages and a description of how to plot out a personal profile and a job profile. Two basic categories of jobs are presented, with listings of types of jobs in each: (a) jobs based mainly on
language skills, (b) jobs requiring language skills plus knowledge or training in another field. Courses of action to follow in preparing for various types of employment are described briefly. A categorized list of addresses to write to for further information is also provided.


Nine interviews are presented with persons connected with Oklahoma businesses, a children's hospital, and the Oklahoma City Police Department. The intent of the presentation is to demonstrate the need for Americans to acquire skills in foreign languages. A range of topics is covered in the interviews, such as, the usefulness of specific foreign languages, how personnel use foreign languages, situations in which a need for a foreign language was felt, and foreign languages in the schools.


A questionnaire was sent to 260 German-owned companies in the United States to determine to what degree English was adequate for dealings with Germany and to what extent bilingualism for American employees was preferred. Bilingualism was preferable and prevalent. Students need to combine the study of language and another field.


A career-oriented foreign language program is discussed that takes into account marketable skills of foreign language majors for a number of careers. The program is threefold. First, it recognizes the need for language skills to supplement technical, business, and professional skills to expand educational knowledge; capabilities in diplomacy and foreign trade; and awareness and appreciation of other languages, cultures, and societies. Second, it relates this need to the school district's desire to meet eight critical goals in student education including increasing speaking, listening, reading, and writing abilities, self-confidence, and responsibility. This also includes preparing the students to participate in the world
with integrity, respect, and with regard for the welfare of others. The third aim of the program is to help students gain competence in cultures and prepare for the job market. Charts are presented that depict the objectives, activity, time, method, instructional mode, evaluation, and accuracy of curriculum models designed to socialize the learners, develop their foreign language ability, develop their basic skills for continued learning, and prepare them for future employment. The appendices include charts of (a) foreign language department enrollment from 1976 to 1980, (b) career opportunities for foreign language and related area majors, and (c) firms employing foreign language speakers.


Americans must realize the growing importance and frequency of foreign involvement in our lives and economy. In dealing with other countries, we must overcome the language barrier, learn about laws and customs, and deal with living style differences.

Hamilton, Roland and Lister, Susan. Foreign Languages and Careers: An Outline. San Jose, California: P.O. Box 5995, 1978.

The purpose of this outline is to give teachers and counselors general information on the vocational utility of foreign language skills, on the assumption that this information will help to increase and maintain enrollment in foreign language classes. Information is divided into two basic categories: "Language Important Careers" and "Language Essential Careers". A third section outlines ways to motivate language students through career information. A bibliography and a list of useful addresses complete the outline.


Knowledge of a foreign language can be vital for those in the health fields and police and fire services. Examples are cited, and reasons for learning a second language at different ages, from childhood to old age, are discussed.


The authors divide the occupations into those in which the language is an auxiliary skill versus a primary skill. The former group includes business and commerce, civil service, education,
law, library science, media, science, service occupations, social sciences, and travel and tourism. Foreign language teaching, interpreting and translating comprise the latter group.

The emphasis is on the identification of occupations in which knowledge of a foreign language is necessary for a job. Numerous examples of employers needing bilingual staff members in different parts of the country are given as well as reports from several employees that learning a second language would be helpful on their present job.

Some job duties are described for some of the occupations. Also, the need for specific languages in particular areas of the country are given. A wide range of occupations and skill levels is included by category.

The "primary skill" occupations require college degrees and specialized knowledge. A position as a teacher aide is identified as an employment opportunity for noncertified personnel.


A short article that argues for an awareness on the part of employers and teachers of the important role language skills can play in industry.


Huebener discusses the field of foreign languages, that knowledge of a second language is a "cultural and vocational asset". He provides the historical background on language learning as well as bilingual education and the need for trained personnel. Many comments from business and professional people are presented. The author emphasizes that "language is but an additional asset", that technical skills are of prime importance.


Characteristics of corporate language training programs and policies, and the role of translation and interpreting
were studied. Of particular interest was the extent to which language requirements and language training are included in corporate planning. Also investigated was the extent to which occupationally oriented special purpose language training is included in the language training provided to corporate employees. Responses were obtained to a twelve-page questionnaire for 129 American firms doing business abroad. Among the findings are the following: (a) Spanish is the language most studied by U.S. nationals going abroad to work and also the language most involved in translation and interpreting, (b) U.S. corporations doing business abroad rely primarily on English as the business language and the means of communication, (c) language training is provided to a majority of U.S. national employees going overseas and outranks technical, cultural, and managerial training in the type of training provided, (d) languages for special purposes training is only rarely included in U.S. national employees' preassignment language instruction, (e) English is generally the language in which technical training is given to non-U.S. national employees overseas, and (f) a far greater commitment exists to language training (specifically English language training) for non-U.S. national employees than for U.S. national employees. A bibliography is included.


This study of the foreign language requirements of U.S. Corporations doing business abroad examines characteristics of corporate language training programs and policies with regard both to U.S. national employees going outside the United States to work and to non-U.S. national employees, generally working in their own countries. The role of translation and interpreting in the corporate environment both within the United States and abroad was also studied. Of particular interest were the extent to which language requirements and language training are included in corporate planning and the extent to which occupationally-oriented special purpose language training is included in the language training provided to corporate employees. Data were collected by means of a detailed questionnaire sent to the U.S. headquarters of 267 American companies reported to be doing business abroad. Questionnaires were returned by 184 companies. Among the findings are the following: (a) the greatest amount of international business in which U.S. corporations are
involved is currently being done in Western Europe, followed by Central and South America, Canada, the Middle East, and the Far East, (b) Spanish is the language most studied by U.S. nationals going abroad and also the language most involved in translation and interpreting, (c) U.S. corporations doing business abroad rely primarily on English as the business language and the means of communication, and (d) language training is provided to a majority of U.S. national employees going overseas and outranks technical, cultural, and managerial training in type of training provided. A sample questionnaire is included.

A, E, D

Jackson, Mary H. What and how for foreign language students: what are the career opportunities and how to prepare for them. ERIC listing - ED 107 095.

A guide to career opportunities in foreign languages and to all programs which prepare students for them. Programs at Northwest Missouri State University are listed which combine study in foreign languages with other disciplines, including business, economics, office administration, sociology, political science, history, Latin American studies. Information is provided on the field of translation and interpretation as well as other career possibilities related to foreign languages. Special attention is given to employment opportunities at the United Nations, including public information officers, translators, interpreters, librarians, clerks, secretaries, and guides. Addresses for further information on career opportunities in foreign languages is provided.

A


Foreign language proficiency is considered a valuable asset, if not a requirement in military service, government and business assignments abroad, exchange programs of students, teachers, and representatives from many additional fields. Foreign language competency, added to other skills, is considered to enhance job and salary opportunities.

Although the focus of the guide is on counseling secondary students on vocational opportunities coupled with foreign language skills, the authors realize the potential national resource of minority language groups for the language competencies. A chapter on "Vocational Opportunities for Persons with Language Competencies" includes some occupations relevant for this study's population.
Several chapters that are not relevant to this study's purposes are: "On Developing Communication Skills"; "Which Languages to Learn"; "When to Begin Foreign Language Study"; "Predicting Success in Foreign Language Study"; "Opportunities for Out-of-School Practice"; and two chapters on foreign language entrance and degree requirements for the B.A. and B.S. degree.


Seven courses or programs at different colleges emphasizing specific career applications of languages are described. They include: (a) technical French, (b) Spanish for law enforcement and correctional personnel, (c) executive German, (d) proyecto desarrollo economico, (e) Spanish for medical professions, (f) elements of foreign language, and (g) business French and business Spanish.


A report on a survey of the use made of foreign language by industrial firms. The findings are tabulated according to personnel, linguistic analysis, and linguistic profiles. The conclusion is that the development of speaking and listening skills should figure prominently in a business oriented language course.


Advice to foreign language majors seeking jobs in other fields includes identifying transferable skills and preparing to market those skills. Language students often have developed skills in communication, interpretation, and analytical thought. These abilities are occupationally useful.


The Market for Foreign Languages Study was begun in South Carolina to ascertain both the State's projected needs for modern foreign language competencies and the State's foreign language resources over the next five years. Questionnaires have been sent to industrial plants, secondary schools, and junior and senior colleges. Of the plants responding, 21.48% presently use or expect to use foreign language skills. Such firms engage
in business abroad and use the languages in manufacturing or marketing. Staff members speaking foreign languages do needed translations or use the language in overseas business or with foreign businessmen in South Carolina. Most businesses would like to employ engineering or management graduates with foreign language skills. Languages that will be needed most in the future are German, Japanese, Spanish, French, Chinese, Portuguese, Russian, and Swedish. Of the schools questioned, most teach some foreign language, chiefly French, German, Russian, and Spanish. Enrollment in high school language classes is constant or growing; in college it is tending to decline. Schools also gave their activities and plans in regard to dropping or adding foreign languages and their policies on foreign language requirements. Reasons given by the educators indicate that languages are generally selected because they are traditional, rather than because of community needs. The future outlook is that the business community will develop a substantial demand for people fluent in Japanese and Chinese before schools can meet the need. Copies of the survey forms and accompanying letters are appended.


Several factors come into play in the discussion of foreign languages and improved prospects for employment. With regard to the question of proficiency, it seems that prospective employers are more realistic than teachers in their expectations. If an employee is good in the field he or she is in, further language training is often made available. A survey of firms hiring personnel with some German-English skills indicated that there were increasing numbers of openings for persons with reasonable fluency in German and expertise in another field. The transportation industry which is involved in international travel requires basic communication skills. Because of the growth of multi-national corporations and the influx of immigrants, American communication needs are changing rapidly. Other factors in communication patterns are competition among industries and increasing U.S. involvement everywhere overseas. With these changes comes an increased marketability for foreign language skills.

Describes a pilot project designed by a community college to help employees of a local company solve a language-barrier problem. The bilingual course combined English-speaking and Spanish-speaking employees in the same class so that they could help each other and featured lessons tailored to the needs of the company. Sample lessons are presented.


Emphasizing that training professionals must do some predicting and shape programs to meet the human resource needs of the future, the author discusses qualitative and quantitative changes in the work force. He also explores the effects of America's bilingualism, the rise of socio-technical changes and labor market changes.


A survey of Oklahoma businesses dealing in international trade shows that these firms need personnel skilled in foreign languages. Career areas in which these skills are needed are varied, and applicants with language proficiency in addition to other skills could have an advantage over other applicants. Some respondents commented that language teaching methods and content should be changed. Of firms responding, only one-quarter currently use employees with foreign language skills, but over half would use them if available. About half indicated that a future expansion would create demand for foreign language skills. Languages considered most useful were Spanish (by 90.3% of respondents), French, German and Japanese, with Arabic, Italian and Russian also noted by several. Over half of those surveyed would desire at least conversational ability, and about one-third would need translation, composition and technical language skills. Personnel in sales, engineering and clerical work would be most likely to need foreign languages.

A study was conducted preliminary to establishing a linkage between the needs of business and government for personnel qualified in foreign languages on the one hand, and the need for career opportunities for college students studying foreign languages on the other. This volume reports on the accomplishments of each phase of the study. The initial phase consisted of a survey of the literature, to be embodied in an annotated bibliography. The government and business sectors were then queried extensively on their needs for foreign language-trained personnel. Finally, the results of this needs assessment coalesced into models for curriculum and material development. The project is seen as paving the way for a working relationship among the business, government, and academic sectors, whose mutual lack of communication has in the past resulted in wasted talent and training on the one hand, and imperfectly met personnel needs on the other.


This document consists of the annotated bibliography compiled as part of the Languages of the World of Work (LWOW) project. The bibliography specifically concerns language training for the world of work. Citations include both published and unpublished books, monographs, pamphlets, journal articles, films and other media which: (a) are relevant to the overall study or to anticipated future studies in the field, (b) contain research reports or curriculum designs relating non-English language instruction to the world of work or career preparation, (c) comprise curricula and/or instructional materials, techniques, approaches, teaching manuals, for occupationally oriented language study, (d) inventory and/or forecast manpower requirements in industry and government which encompass occupations requiring more than one language proficiency, (e) examine the need for language capabilities in occupations, and (f) assess the impact and implications of the existence of a portion of the labor force consisting of monolinguals in languages other than English, for language training or the employment of bilinguals. The final section lists relevant bibliographies and guides. Author, document source and subject indices conclude the volume.

This teacher's manual accompanies a student workbook for minority groups who have been exposed to non-standard English or foreign language environments and/or who are in need of perfecting their English language skills. Focusing on the Hispanic culture, the student workbook is intended to serve as a guide to career awareness for bilingual and monolingual junior and senior high school students, adults in continuing education, students in alternative schools, and students in correctional institutions. This teacher's manual includes the following materials: suggestions which may be used by professionals and para-professionals; an extensive bibliography; a question and answer forum; and an appendix containing three related professional papers which cover the career scheme of Birmingham's (England) secondary schools, suggestions for decreasing the number of dropouts, and coping skills in adult basic education. Also attached to this document are two booklets: (a) an evaluation guide which includes suggestions for appraisal, placement, and diagnostic testing, (b) methodology for multi-cultural expansion, (c) answers to four of the six tests included in the student's evaluation booklet which is attached to the student workbook, and (d) a set of illustrations which accompany the student workbook activities. An audio cassette which records the workbook dialogs and selected exercises is also available.


Focusing on the Hispanic culture, this student workbook is intended to fill the needs of minority groups who have been exposed to non-standard English or foreign language environments and/or who are in need of perfecting their English language skills. It can be used with bilingual or monolingual junior and senior high school students, adults in continuing education, students in alternative schools, and students in correctional institutions. Presented in seven units, the concepts and exercises in this workshop serve as a guide to career awareness, while raising levels of aspiration, and emphasize cognitive and affective learning. The program also offers a guidance process designed to encourage community involvement. All seven units are developed around dialogs, the last two of which are units for the more advanced students. Some of the careers included relate to health services, law enforcement, communications, mass transportation, real estate, law and consumer economics, import-export business, franchises, and foreign service. A number of exercises show women in key positions. Included also is a student's evaluation booklet which contains six kinds of proficiency tests. A teacher's manual accompanies this workbook and contains teaching suggestions,
related information, an evaluation guide, and a booklet of illustrations related to the student workbook units. An audio cassette which records the workbook dialogs and selected exercises is also available.

A


This article provides a general overview of the importance of foreign languages in different businesses and government, and the lack of specific training for these positions. Orwen cites the "desperate need" for better trained young linguists in a variety of fields. As a solution, he discusses setting up a program consisting of a series of courses combining technical courses in science and economics with foreign languages. He notes the importance of teaching vocationally oriented foreign language skills, and lists several texts in several languages that would be appropriate.

A, E


This is the first of two volumes of working papers produced by working groups of the National Congress on Languages in Education. The papers in this volume are concerned with the priorities to be accorded to non-native languages at all levels of education in Britain. The following papers are included: (a) "Foreign languages in the school curriculum" by C.V. James, (b) "The linguistic needs of pupils" by E.W. Hawkins, (c) "Priorities and patterns of provision" by G.R. Potter, (d) "The education of teachers of foreign languages" by R.J. Godfrey and E.W. Hawkins, (e) "Foreign languages in industry and commerce" by A.C.W. Crane, and (f) "The views of school heads: a survey" by G.M. Matthews.

A


The overall goal of the 3M company in terms of the language training of its employees is to prepare individuals to be able to carry on everyday business on an international level and to develop employees who have both language skills and awareness of other cultures. The 3M Language Society consists basically
of conversational language courses for employees who want to learn or refresh language skills. A hosting program gives American families the opportunity to have business visitors from various countries live in their homes, to the linguistic and cultural benefit of both. Other social activities are designed for cultural education. Specific language needs in industry include: (a) the ability to conduct seminars and talks in the language of a given country, rather than in English, (b) product knowledge to go along with language capability and the development of specialized terminology, (c) glossaries of specialized terms, (d) employee publications for overseas employees, (e) language tutoring, and (f) basic language skills enabling teachers to interact with the children of foreign families in their native language.


Documents the growing interest in foreign language study in the United States, concentrating on employment opportunities, economic factors, and educational change.


This paper focused on identifying jobs (other than teachers) for college graduates majoring in a foreign language. Companies with overseas affiliations or foreign firms opening in U.S. cities were identified. Letters were sent to determine if knowledge of a foreign language was a prerequisite for employment. Other departments in the university sent out hundreds of letters to identify types of organizations which were in need of foreign language speakers.

Some of the occupations discussed in this paper require advanced education and would not be appropriate for graduates from bilingual vocational training programs.


This handbook provides information on a variety of topics in addition to occupations in which a foreign language is an asset. Several of the sections of the book are not relevant to this study (e.g., general recommendations for language study, principal language families of the world, foreign language courses and degree requirements).

Suggestions are made for increasing student interest and motivation for language learning. Classes should be settings for communicating the language and not for mere rote learning of pattern practices. Students should be aware of the roles languages play in the world, career opportunities, and different cultures in the community.


The career option of translation and/or interpretation is described. The history of the occupations, potential employers and salaries, the work done, training and places it is given, and the demand for different languages are discussed.


This model combines in a team-taught course the study of business and a foreign language. The objective is to give business students a foreign language experience in a relatively brief time and also to offer them a business-oriented introduction to a culture other than their own. Students in business courses are preparing for a career in international business, and so they seek to study a language and a vocabulary that will be of practical use in the not so distant future. The argument that English is the international business language is countered with a discussion of the economic position of Germany and a description of a German business-language course. In the part of the course taught by the business specialist, the following instructional techniques are employed: (a) lecture/discussion, (b) map work, (c) group work, and (d) individual reports. The language component aims at enabling students to acquire a working knowledge of business German. Students at all levels of language proficiency use key-word vocabulary exercises, advertisements and other such uncomplicated materials for reading texts, as well as statistical tables and periodical articles. Lectures and discussions cover all aspects of the German business scene.
This publication is geared to Americans with foreign language skills. However, foreigners who are citizens for more than ten years can benefit from it. Some of the career opportunities listed include earnings (which are outdated), and advancement opportunities; others list the educational requirements, age limits, and more specific skills needed.

Two questions which need to be asked are: (a) What is really being accomplished in our national language training activities? (b) What needs to be accomplished, given the state of national and world needs for language competencies? Teachers should examine language competencies related to students' chosen careers.

This report examines attitudes toward and developments in foreign languages in British industry and education during the past ten years. It reviews the following reports: (a) the York Report published in 1974, (b) surveys of the London Chamber of Commerce and Industry, (c) surveys in industry, such as that by British Leyland in 1976, (d) a 1979 government report on local authority arrangements for the curriculum, in which the need for clear policies on foreign language education in the schools was discussed, (e) the report by Barclays Bank in 1979, which compared attitudes, procedure, and export performance in France, Germany, and the United Kingdom, and which highlighted the need for personnel with foreign language skills, (f) the Duke of Kent report, a broad survey and summary of the foreign language situation in industry and commerce, and (g) the Betro Report in which statistical evidence is provided. The study concludes with a review of language and industry conferences and local surveys on the question, a summary of the positive developments within the past five years, and a list of eleven recommendations for action.
Minority group problems, concerns, and interests


This guide for counselors working with bilingual secondary school students outlines various student needs and discusses the counseling skills and techniques necessary to meet these needs. Strategies for helping students to discover themselves, to locate needed information, and to make decisions wisely are delineated. Activities are suggested, and worksheets are provided to help bilingual students develop skills and identify their own values from both cultures. Several programs and activities are described for helping limited or non-English-speaking students adjust to their new schools. Course selection, career planning, and job-seeking skills are designated as areas in which counselors should assist bilingual students. A list of classroom and social problems of omitted English-speaking students is followed by a list of interventions that counselors and teachers may use to mitigate some problems.


The article describes a British project to demonstrate the value of appropriate training for improving industrial and race relations. Included in the article are: (a) an English language course for immigrants in factories, (b) an industrial relations course for immigrant leaders, and (c) a course for indigenous supervisory personnel on immigrant culture and customs.


This resource guide provides help for the counselor attempting to give career advice to Spanish-speaking and Chicano students in high schools and community colleges. The guide is presented in nine sections. The first section provides an overview and general information about Hispanics, along with a review of the literature and an annotated bibliography. Sections 2-4 concern student assessment, language program placement, and affective considerations (such as self-image and decision making) of the student. Section 5 concentrates on techniques for retaining students in school and counseling those who are leaving school. Section 6 describes the education-work relationship and suggests such strategies as cooperative work experience programs, vocational programs, and career guidance.
In section 7, job search and interview techniques to be taught to students are presented. Section 8 is an annotated bibliography of Spanish language materials for students; while section 9 suggests additional program development resources, including vocational education law as it applies to minorities, student recruitment strategies, and evaluation of counseling programs.


Summarizes findings of a study undertaken to: (a) identify major problems facing Indochinese refugee women in the United States, (b) review programs available to them, including special women's project, and (c) suggest changes in current programs which would respond more fully to women's needs.


Issues in curriculum development in foreign language study are discussed. Possible approaches to needs assessment are suggested by a Northeast Conference questionnaire, a New York State curriculum guide, and a position paper of the American Council on the Teaching of Foreign Languages. The goals of global and international education in grades K-12 are presented in a summary of a panel study done for the President's Commission on Foreign Language and International Studies. The concept of multicultural education is categorized into various topics as a preliminary to a modular instructional approach. Career education is discussed in terms of developing student awareness of and interest in careers that require foreign language skills. Career-oriented curricula are seen as the key to bringing foreign language instruction in line with career opportunities. Methods for meeting the needs of older or returning students are discussed. Finally, the notional/functional approach is seen as the likeliest route to effective teaching for students with special needs.


The author gives limited information about the need the Puerto Ricans have concerning the English language and various occupations. Most of the book is reserved for information concerning bilingualism and problems as it relates to speech and societal mores.

This book concentrates on how quickly children and grandchildren of immigrants become assimilated into purely American culture and do not maintain their cultural heritage, most notable being their language. The author attempts to explain why it is important for ethnic groups to maintain their ethnicity to a point, as opposed to dropping it all together in light of the influence of the American culture.

In the area of employment, the author makes light reference to the belief among minorities and businessmen that unless they (ethnic groups) have a command of the English language, employment possibilities will be severely limited. There is no mention of employment for bilinguals, or employment areas where a second language would be a useful tool. The thrust is towards maintenance of cultural identity.


The orientation of this book is bilingualism, the problems associated with it, and the integration/elimination of the "mother tongue" (native language). Interspersed throughout the book are dealings with phonetics, child rearing as it applies to growing up bilingual, and assimilation of the language into English.


The influx of Cubans into Miami, Florida, since the Cuban Revolution has resulted in a large Spanish-speaking population in that city. The purchasing power of this segment of the population is making it necessary for English-speaking residents to learn to communicate in Spanish.


Highlights the major characteristics of the Korean American population and lists some of their most pressing problems and needs.
The obvious problems encountered by the Indo-Chinese refugees coming into the United States were accentuated by the confusion, swiftness, and finality of the massive exodus. The concept of an outreach counseling program was developed to assist the Indo-Chinese in overcoming those barriers standing between them and a goal of self-sufficiency within the American culture. While this model program was designed for Indo-Chinese refugees it would be applicable to any immigrant population. Refugees needed assistance and counseling in the transition to a job environment. They needed to know requirements and qualifications for specific jobs, factors to be considered in making a career choice, and the differences between job requirements in the United States and in their native country. To help solve these problems, a program of career, educational, and vocational counseling, accompanied by assessment of immediate and long-range goals and needs, was begun in an effort coordinated with existing programs. Indo-Chinese and American counselors and volunteers were used in a team approach in an attempt at cultural interaction and ensuing understanding. This Montgomery County project focused on participants in two programs: (a) CETA/ESOL (Comprehensive Employment and Training Act) and (b) ABE/ESOL (Adult Basic Education). CETA/ESOL is designed to meet the needs of Montgomery County residents also classified as disadvantaged because of limited English language proficiency and educational background.

Describes a course developed for the six supervisors of a Scarborough factory who have Italian as their first language. Course objectives include competent communication with native English speakers at the management level, ease of self-expression in meetings, and clarity of communication of hourly workers of other language groups.
Specific occupational references


This bibliography contains curriculum materials for vocational education programs in English and Spanish. In the first section, non-English monolingual materials are listed for five vocational areas: (a) occupational areas (e.g., accounting, agribusiness, allied health, clothing), (b) mathematics, (c) vocational skills, (d) materials for other related areas (e.g., career education, career guidance, finding a job, consumer education, and drivers education), and (e) miscellaneous topics. In the second area, vocational English as a second language (ESL) materials are listed for occupational areas (e.g., automotive, secretarial and commercial, technical); and for career, consumer, and survival skills education. A final section provides the addresses for publishers cited in the bibliography.


This document contains the curriculum guide and the first seven monographs of the career education manual which was developed to assist the instructor in presenting a career-awareness course to adult, limited English-speaking farmworkers. The curriculum guide is divided into three sections. The first section is composed of four introductory units designed to enhance student self-awareness. The second section is composed of fifteen career cluster units intended to acquaint the student with information about career areas. Unit objectives, content information, and motivational exercises are included with each unit. The third section includes instructor notes keyed to each unit. The career education manual contains career monographs written at the 5th-grade reading level in both English and Spanish to facilitate comprehension for persons with limited reading.

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ability. The seven monographs included in this document provide information on occupations in the areas of agriculture, manufacturing, marketing/distribution, consumer/homemaking, public service, and personal service. The guide and the career education manual have been used successfully with persons aged seventeen and upward during 1978-1979 at two cooperating sites in California.


A project was conducted to design, develop, and evaluate the effectiveness of bilingual (Spanish and English) career education materials for adult farmworkers with limited English-speaking ability. A career education manual, a series of audio- and video-taped interviews with former farmworkers employed in various job cluster areas, and a curriculum guide incorporating the manual and taped interviews were developed and field-tested. Volunteer adult farmworkers attending one of two existing education programs were assigned to either a career education class (utilizing the above curriculum materials) or a waiting list control group. A pre-posttest control group experimental design was used to evaluate the impact of the course on each student's knowledge of career information, realistic career alternatives, educational and vocational aspirations/expectations, career maturity, and self-esteem. Results of field-testing at both sites indicated that the amount of career information obtained by the students in the career education course was significantly greater than the control group students. The career education course did not appear to have a similar positive effect on the other major dependent variables. The students, however, did indicate that they were satisfied with the utility, helpfulness, clarity, and realism of the course.


This document contains the last nine monographs of a career education manual developed to assist the instructor in presenting a career-awareness course to adult, limited English-speaking farmworkers. These career monographs are written at the 5th grade reading level in both English and Spanish to
facilitate comprehension for persons with limited reading ability. The nine monographs included in this document provide information on occupations in the areas of health, recreation, fine arts/humanities, communications, transportation, construction, business/office, environment, and marine science.


This book is the fourth in a set of four occupational and business education curriculum guides which were developed for Spanish-speaking students with limited English-speaking backgrounds and also for foreign language students who desire to reinforce their Spanish language skills. The guides are structured so that the teacher can provide service to students of each category within the same classroom environment. Volume four explains the duties and responsibilities for employment in several entry-level business positions. The twelve units included cover the following employment areas: (a) receptionist, (b) clerical workers, and (c) service clerks. In all four guides, the vocabulary is listed in a table for easy reference and should be reviewed prior to working through a unit. Tests and answer keys are also included.

C Cornell University, School of Hotel Administration. Career Ladders in the Foodservice Industry. Report submitted to the Office of Manpower Research, Manpower Administration, United States Department of Labor: June, 1970.

This study involved a detailed examination of the non-management career systems in eighteen companies in the foodservice industry. A career progression model providing for both vertical and lateral movement is presented. Data collected include the identification of skill areas, physical requirements, the educational level and experience prerequisites; recruitment procedures; training and advancement opportunities, and training costs. Over 300 foodservice employees were contacted, as well as corporate officials and those who had left the foodservice industry. The advantages and disadvantages of working in the industry are discussed from the employee's viewpoint, as well as recommendations for improving the job environment. Corporate officials also placed emphasis on incorporating minority group members into supervisory positions.
This curriculum guide contains materials necessary to implement the vocational English as a Second Language (ESL) program for Farm Equipment Operators developed by the Ceres Unified School District. The first two sections provide the plans and accompanying forms for needs assessment and recruitment/intake/enrollment. In the third section a curriculum development plan is described. It includes a course outline, timeline, student progress chart and checklist, and lesson plan form. The next section contains thirty weekly lesson plans, indicating topics, behavioral objectives, outline, vocabulary, materials, student worksheets, evaluation instruments, and lesson evaluations. Vocational topics include identification of tools and farm equipment parts, safety, gasoline engines, and farm equipment operation and maintenance. ESL topics include numbers and vocabulary and identification of tools and equipment and their parts. A midterm and two glossaries are provided. The final section presents a job development plan for furthering students' training opportunities by placing them in on-the-job training, as well as accompanying forms.

Educational Factors, Inc. has developed an extensive series of curriculum materials under the "Discover the World of Work" title. Since each individual booklet is similar in format, we will only list the various titles and present one example.


The above material is also on levels A and B, which are for less advanced students. Level C is for advanced readers, and should be used only as introductory material for very limited English-speaking students. As an example, we will now present the abstract for the shipping and receiving clerk booklet.
Developed for the Spanish-speaking student at the advanced reader level (Level C), this booklet is one of three modules (Levels A, B, C) in a curriculum unit on the shipping and receiving clerk. (The curriculum unit is one of a series of twelve curriculum units, each on a different occupation, designed to develop career awareness in migrant and non-migrant Spanish-speaking students at different reading levels). The booklet is divided into three sections: (a) teaching unit, which includes a listing of occupations related to the shipping and receiving clerk at the entry and professional levels, unit objectives, major activities, coordinated subjects, attitude and awareness concepts, and a suggestion for a large group experience which would provide a broad focus on the career cluster, (b) Student Activities I and II (in separate sections), which provide text and illustrations with corresponding discussion questions and activities presented in the teaching unit, and which allow the testing of student learning according to unit objectives, and (c) Criterion Referenced Tests, which correspond to the two student activities. All information is presented in both English and Spanish on a simultaneous, page-by-page basis.


This package represents a program guide for preparing Spanish-speaking students to become bilingual secretaries or otherwise to put their bilingual skills to use in the office. The first part of the package reports on career possibilities and on the cultural background and education-related characteristics of the student population in question. The curriculum materials that follow are divided into the following areas: (a) office procedures, (b) typing, (c) English for specific purposes (e.g., alphabetizing, writing from dictation, graphs and charts, business correspondence, and using the telephone), (d) English as a second language (i.e., the development of expressive fluency in professional and social situations), and (e) a selection of units from the above headings presented in Spanish. A bibliography is appended.

This curriculum guide contains materials necessary to implement the vocational English-as-a-Second Language (ESL) program for Agriculture Secretary-Bookkeeper developed by the Ceres Unified School District. The first two sections provide the plans and accompanying forms for needs assessment and recruitment/intake/enrollment. In the third section a curriculum development plan is described. It includes a course outline, time line, student progress chart and checklist, and lesson plan form. The next section contains thirty-one weekly lesson plans, indicating topics, behavioral objectives, outline, vocabulary, materials, student worksheets, evaluation instruments, and lesson evaluations. Vocational topics include typing, typewriter maintenance, alphabetic filing, purchase orders, invoices, business machines, mail handling, petty cash, income tax record-keeping, checkwriting, payroll records, bank reconciliations/deposits, job preparation, and portfolio. ESL topics include time, counting, punctuation, use of a dictionary, arithmetic, fractions and decimals, vocabulary, and identification of agricultural and business equipment, tools and/or materials, telephone book, reception, and envelopes. Long and short versions of the midterm and a glossary are provided. The final section presents a job development plan for furthering students' training opportunities by placing them into on-the-job training, as well as accompanying forms.


Written in Spanish, this book gives a listing of the following relevant occupations: assistant administrator of hotels, police work, computer analyst, dental assistant, social worker, stewardess, nurse's aide, teacher's aide, bank teller, truck driver, employment counselor, rehabilitation worker, bus driver, dentist, recreation director, electrician, bank management, lab technician, Federal worker, postal worker, nurse, pharmacist, dental hygienist, telephone repairman, chef and related work, librarian, correctional officer, construction machinery operator, printer, pilot, auto paint specialist, dental technician, radio technician.

Each occupation has information regarding job conditions, necessary education, personal requisites, salary, future (in terms of advancement), and an address specifically related to the job to write for further information.
A six-month research project was conducted to collect data relating to the application of New Careers as a manpower resource for police organizations. The purpose of the New Careers Program (to prepare previously untrained persons with the skills needed to meet manpower needs) is examined. It consists of the recruitment, training and placement procedures, and the development of career ladders for socially and economically disadvantaged persons in subprofessional positions in human service agencies. The use of aides to alleviate the shortage of police manpower as well as to act as a liaison to the community is discussed. Problems affecting the introduction of aides into police work, difficulties in defining the police aide's role, descriptions of programs in a seven city area, the specific job duties, and specific career ladders are presented.

Twenty trades are explored in this bilingual supplementary workbook, designed specifically for native Spanish speakers who are in the process of learning English. The purpose of this book is to ease the Spanish-speaking student from his/her native language into English with as little discomfort as possible. There are twenty chapters in the book with successively more English as the chapters progress. Each chapter begins with a story in both English and Spanish. The first exercise in each chapter consists of ten vocabulary words in Spanish and English with their respective definitions. Various exercises are constructed throughout the unit using the ten words. The work is designed to be used in English as-a-second-language programs, vocational career exploration, gaming improvement, and simulation practice. Some games, crossword puzzles, and other activities are included. The text is illustrated. The units contain exercises related to the following trades: auto body, auto mechanics, baking, carpenter and cabinetmaking, electrical trades, fashion design, commercial foods, health occupations, ornamental horticulture, plumbing, painting and decorating, machine shop, upholstery, welding, graphic arts, air conditioning and refrigeration, commercial art, drafting, cosmetology, and diesel machines.
This study identified competencies needed by a bilingual teacher aide in an elementary school program. The methodology involved: (a) use of task analysis in the form of a 341-item questionnaire, which was disseminated to 131 bilingual teacher aides in Arizona to determine both the difficulty and frequency of their tasks, (b) chi-square tests for significance of the bilingual teacher aides' background data and areas of task performance, (c) structured interviews with 40 bilingual teacher aides, (d) structured interviews with their 40 monolingual supervising teachers (conducted separately), and (e) a review of the literature. Results showed that the bilingual teacher aides are specifically unprepared to perform in the very areas for which they are employed. Courses are recommended and described on the basis of the skills which appeared to be most important to the performance of essential tasks within the bilingual classroom. A bibliography, intended as a guide for teacher aide trainers, is included to facilitate the development of appropriate materials. Recommendations for more effective screening and placement, and for state certification are offered. The research questionnaire is appended along with tables presenting chi-square analysis of the data.

O'Hara, Leonard F. A Successful Training Program for Bilingual (Spanish/English) Nurse Aides. Available from ERIC - ED186059.

In view of the relative absence of Spanish-speaking personnel at area health care delivery sites, Northampton County Area Community College (NCACC), with financial and administrative support from Lehigh Valley Manpower Organization (a CETA agency) and input from the Council of Spanish-Speaking Organizations of the Lehigh Valley, implemented a bilingual nurse's aide training program designed to impart bilingual Hispanics with the vocabulary and skills of a nurse's aide. The six-week course, taught by two bilingual nurses in the summer of 1979, was based on two tests: "The Nurse Assistant" by Donovan et al. and a specially prepared 40-page syllabus. Major instructional topics included communications and interpersonal relationships; hospital environment and safety; positioning, and exercise; surgical asepsis; and observation, recording, and reporting. The students, who met the qualifications of bilingualism, literacy, local residency, extended unemployment, and financial exigency, were instructed Monday through Thursday at the college's nursing laboratory. Clinical experience was provided each Friday at the county convalescent home.
Besides access to the usual college services, students were provided with day care and transportation support. Of the sixteen students enrolled, fifteen completed the program and subsequently took part in an eight-week hospital practicum.


The revolution in telecommunications is discussed and minority group members are urged to become involved in aspects such as resale services, interconnect companies, radio paging services, multipoint distribution services, or information and programming supply services, particularly Spanish-language programming. Funding sources are listed and discussed.


An extremely in-depth look at various occupations, this book begins with a guide showing the reader how to use the handbook, where to go for more information (listed by State and territory), comprehensive information on manpower trends, and assumptions and methods used by the Department of Labor, Bureau of Labor Statistics, in preparing employment projections.

The book then is broken into thirteen sections under the heading Outlook for Occupations. These sections are labeled as follows: industrial production and related occupations, office occupations, service occupations, education and related occupations, sales occupations, construction occupations, occupations in transportation activities, scientific and technical occupations, mechanics and repairers, health occupations, social scientists, social service occupations, and performing arts, design, and communication occupations.

The next major heading, The Outlook for Industries, has as subheadings: agriculture, mining and petroleum, manufacturing, transportation, communications, and public utilities, wholesale and retail trade, finance, insurance, and real estate, service and miscellaneous industries, and government.

In both sections there are specific jobs listed under the appropriate subheadings. The sections work like this: a short summary following the subheading
which describes what that sphere of work deals with. Then the area under consideration is divided into more specific areas (i.e., education and related occupations is split into teaching occupations and library occupations). Then, under each category, a list of specific jobs follows, each of which contains the following information: nature of work, working conditions, places of employment, training, other qualifications, advancement, employment outlook, earnings, related information, and some addresses to write to for further information.

The book ends with a dictionary of occupational titles, an index to occupations and industries and a list of occupational information reprints available for a small fee from the government.
This brochure was developed as part of the ongoing priority in career education established by the Maryland State Board of Education. It was initially intended as an introductory resource guide for teachers, but has since been used successfully with counselors, students, parents, and members of the community. In addition to providing background material and statistics on the tremendous increase over the past twenty years in world trade, investments, and tourism, the brochure contains a chart of specific careers related to foreign languages. The chart is organized according to career clusters (e.g., service, business, clerical and sales, science and technology, outdoor, general culture, arts and entertainment) as well as educational levels ranging from "less than high school graduate" to B.A. or above. A list of suggested teaching strategies and learning activities for classroom use is also included. Some of these activities do not require very extensive knowledge of a foreign language and are particularly suitable for exploratory programs in foreign languages at the middle or junior high school level.

This article discusses the career approach in foreign language instruction, and defines three dimensions for this approach: (a) information, that is, current data about actual jobs requiring language skills, (b) public awareness, and (c) curriculum, that is, providing courses that meet the needs of a career-oriented approach. These three dimensions lead necessarily to activity in other fields, specifically (a) information gathering, (b) bringing information about languages and jobs to the attention of the public, including students, parents, counselors, school administrators and members of the business community, and (c) curriculum development. Due to declining enrollments and changing student attitudes and needs, foreign language
departments need to redefine their goals with a realistic approach to the place of language skills in actual career planning. With this approach, language needs to be offered not as a primary skill but rather as an auxiliary or supportive one. Materials appropriate for career-oriented language courses are needed, and the career approach will also undoubtedly affect teacher training. In addition, interaction between the school and the community is needed, partially in the form of adult language programs, a few of which are described here.


This book is a guide and work manual for all second language teachers. Convinced that the study of other languages and cultures can have a very positive effect on a person's various life roles, the author endeavored to present teaching goals and learning activities which contribute to the preparation of students to be successful in their life roles as learner, citizen, consumer, producer, and family member. The main part of this manual describes many possible second language learning activities under the following course goals, which require students to: (a) be able to examine personal values, (b) value positive attitudes toward self and others, and toward work, (c) know the physical, psychological, and educational requirements of various life roles, (d) know the value of leisure-time activities, (e) be able to explore career possibilities and prepare for a career requiring skills in the second language, and (f) know the techniques for obtaining employment. An extensive section on resources, which offers information to help the teacher implement the suggested learning activities, is divided into three main sections: (a) book companies, (b) agencies and sources of information, (c) bibliography for general information; special information for French, German, Latin, Russian, and Spanish; and vocational information.

A guide to be used by someone exploring his/her areas of interest, it includes legislation, projects and studies from each of the fifty States. Projects and studies are identified as such. All legislation listed in the book has been enacted. Most of the legislative items can be checked with the appropriate State Education Agency or Legislative Service Agency, listed in the Appendix.

The guide contains legislation/projects/studies which affect bilinguals, in some way, by State. For example, an Illinois law which provides for the establishment of bilingual adult vocational educational programs in school districts with a substantial Spanish population, and a Texas project which prepares students to be bilingual office workers because of the need for bilingual secretaries.


A module is presented for delivering basic language skills in Spanish at the secondary level in combination with elements of career education, including career awareness/exploration, self-awareness, decision making, employability skills, and job preparation. The module includes a teacher's guide and gives student career units (business and office, communications and media, health and related occupations, hospitality and recreation, and marketing and distribution). The teacher's guide includes the following information: (a) strategies for implementing the student units and incorporating related resources, (b) specific objectives/activities of the student units, and (c) descriptions of contents of each unit. Vocabulary quizzes, texts for listening comprehension tests, career exploration form, and resources are appended. The student units are based on different clusters and consist of two sections: (a) the learning activity package (list of selected occupations, basic vocabulary test, skit, supplementary vocabulary, and supplementary activities) written in part in English.
and Spanish and designed to provide the student with basic skills in the language relative to the occupational unit being studied, and (b) the career research package (information on selected occupations and career exploration form) which provides occupational information and activities to assist the student in exploring a career.


Broadening the concepts about vocational education to embrace a career education approach and changing attitudes about the usefulness of foreign language education have both helped to make the study of a language an acceptable part of career education. This paper discusses the role of language study in career education, and provides suggestions as to how teachers can become aware of the careers in which mastery of a foreign language is an asset. Teachers should also inform students who have not enrolled in foreign language classes about the career value of foreign language skills. Students can be reached through career and guidance personnel. Students will also want to concentrate on skills and concepts that will be of use in their chosen careers, and the resulting need for non-traditional sources of instructional materials and the individualization of instruction constitute a challenge for language teachers. Part of a student's career exploration experience should be a self-examination of his values and a look at the relationship which these values have to a career choice. It is suggested that language teachers incorporate values clarification activities into their curriculum.


The Career Education: Implications for Minorities Conference was proposed as an activity wherein officials of the sponsoring organizations and representatives of the various minority groups in the United States would
unite to develop a dialogue on the development and implementation of career education. The sponsoring organizations were: (a) Council of Chief State School Officers; State Higher Education Officers; National Advisory Council on Vocational Education; and the Office of Education. National leaders from Black, Chicano, Native American, Puerto Rican, Chinese American, and Japanese-American communities represented the minority groups.

The conference goals were: (a) to provide minority leaders with information on the concept of career education as viewed by the Office of Education, (b) to provide the Office of Education with a minority viewpoint on career education, and (c) to develop a dialogue between minority leaders, NACVE, and the Office of Education on matters relating to education.


This bibliography on foreign language instruction and career preparation is divided into four parts. Part I presents general materials on the intersection of foreign language instruction and career preparation. Materials in Part II provide specific examples of programs or courses that are designed to address the issue of preparation of students of foreign languages for employment, especially in areas other than teaching. Part III presents materials describing occupations that call for skills in foreign languages. Part IV contains references to courses designed to teach foreign language skills related to specific occupations. While many of the documents may be of interest to broad audiences, Parts I and II may be of particular interest to teachers, counselors, administrators, or program planners; Parts III and IV are of special interest to students. Within the context of this document, the term "foreign language" refers to languages other than English that are or might be taught in United States or Canadian schools and universities. Foreign language competence refers to the ability to speak, understand, read, and write with a considerable degree of proficiency in a language other than English.
Foreign language education and learning


This paper examines the role of foreign language teaching in answering the external needs of students, including equipping the student with vocational or professional skills, and the internal needs, including the broadening of perception of self, society and culture. Communication in general and participation in society benefit from foreign language education.


The author speaks on the importance of learning a second language, but that at this point in time the education received in a second language is poor. Discusses the overimportance given the so-called "Mother Tongue (English)" and the effects this has on becoming bilingual or multilingual. Discusses the problems and mistakes of repressing the native language of immigrants (children in particular). He goes on to state that the national language policy of the United States is wasteful of human resources and destructive of personality, and points out six occurrences which may signify a change in the national policy.


Comments of issues of discrimination in foreign language departments which were debated at a session of the 1980 MLA meeting in Houston, Texas. Focuses particularly on the preference for hiring native speakers rather than American-born instructors, showing that educational philosophy does not justify this preference.


The purposes of this paper are to: (a) demonstrate the absolute necessity for foreign language study, (b) dispel some of the fancies or fantasies that have
grown up concerning the learning of foreign languages, and (c) suggest various alternative programs in foreign language study and possible ways of implementing them. Some of the fallacious ideas argued against in this paper are: (a) foreign language study is valuable only for those preparing to teach or become interpreters or translators, (b) North Americans cannot learn foreign languages as easily as Europeans or Asians, and (c) all foreigners, especially educated Western Europeans, speak several languages, including English. Also discussed are the ways in which foreign language study can help students in the goals of learning to live, learning to learn, learning to use language effectively, and learning to earn a living.


Five directions foreign language departments should explore in the 1980's in order to revitalize their programs include uniting foreign language and international studies, cross-cultural studies, teaching process of communication, career preparation, and language for humanistic studies.
Bilingual education/bilingual vocational training


This study is the first comprehensive examination of the characteristics of the clientele of bilingual vocational training and the operation and outcomes of programs providing such training. The evaluation results are germane to legislative and administrative policy making, and to the operation of programs with Subpart 3 funding, State vocational education set-asides for limited English-speaking persons, and other sources. The evaluation was based on a probability sample of 715 trainees in 87 vocational classes in 38 vocational training programs. The evaluation included pre- and post-program measures of the labor force status of trainees. Measurements of English language proficiency were obtained during two interviews with trainees while they were enrolled in vocational classes during the Spring and Summer of 1978. All information on program operations was obtained from personal interviews with program directors and vocational instructors. Case studies were conducted of the relationships between vocational training and ESL instruction in 25 of the programs. The key findings of this study focused on the status of Bilingual Vocational Training; The Target Group and Trainee Characteristics; Program Design and Evaluation; Vocational and English-as-a-Second Language Instruction; Trainee Outcomes: Pre-Post-Changes in Labor Force Status; Factors Associated with Labor Force Outcomes, Post-Program Job Satisfaction; Correspondence of Post-Program and Training Occupations; Occupational Demand and Shortage Factors; Trainees' Satisfaction with Program; English Needs on Post-Program Jobs; English Language Proficiency and Post-Program Occupations. The Program Evaluation sought to answer four key questions on whether the program did enroll the appropriate target group?; provide effective instructional services?; provide appropriate and adequate non-instructional and supportive services?; and, reflect effective planning and management? The contractor for this study was Kirschner Associates, Inc. Their recommendations are presented regarding legislative and administrative issues for consideration by policy makers.


A program was established to equip foreign adults with the necessary information, attitudes,
and skills to survive in the urban world of work. Staff from the City College of New York worked in the Queens area of New York City to develop a program which included English-as-a-second language classes, world of work seminars, and employment-related counseling. The program provided three ten-week, forty-hour cycles of ESL instruction. Topics included: (a) seminars on such topics as career choice and decision making, job search techniques, how to obtain licenses and foreign educational credentials, and the basics of self-employment, and (b) such supplementary activities as citizenship courses, tutoring, and translation and resume preparation services. Students, staff, and community advisors considered the program successful.


Characteristics of successful adult vocational English-as-a-second language (ESL) programs are described, and psycholinguistic, sociolinguistic, and pedagogical insights are presented. Characteristics of a successful program are as follows: (a) they are learner-centered, (b) there is recognition that English can and should be learned for specific functions and domains, (c) behavioral objectives are specified that are job related and appropriate materials are used, (d) the vocational ESL program is embedded in a good vocational program, (e) the program is functional in nature, (f) there is recognition of the value of vocabulary in the job context, (g) the program builds on skills the adult already has, and (h) there is recognition of cross-cultural differences, especially those relating to education and language learning. Future research needs include: (a) data-gathering of the actual language used in occupational situations, (b) determination of what really matters among the various skills, (c) evaluation of existing materials and programs in vocational ESL and adult ESL in general, and (d) more assessment of learner needs.


This monograph addresses the task of designing, operating and evaluating bilingual vocational instruction programs. The monograph does not purport to provide all there is to know about bilingual vocational education, but it can be used by program...
planners and operators to obtain ideas, suggestions and some
directions to help trainees prepare for viable job opportunities.
The monograph consists of three chapters: Chapter I - Organizing
a Bilingual Vocational Training Program; Chapter II - Adapting
English-as-a-Second Language to Vocational Areas; and, Chapter
III - Evaluating the Effectiveness of Bilingual Vocational
Training Projects. Chapter I describes the prerequisites to
program planning; how to plan a Bilingual Vocational Training-
Program; and developing an effective implementation of the Pro-
gram. Chapter II discusses in an introduction how to make ESL
relevant to the vocation, and proceeds with the tasks of mastering
English; an oral approach to mastery of English; and strategies
in adapting ESL to vocational skills. Chapter III focuses on the
purpose and description of an Evaluation Method; the type of
information needed by Project Directors and Evaluators; how to
collect data and do the assessment; how to use evaluation findings
in planning and operating a Bilingual Vocational Training Program.
The monograph includes a self-assessment form to assess the ac-
tivities of a Bilingual Vocational Training Program.

Langley, Steve. Bilingual Vocational Education Project.

The two-year operation of a bilingual (Lakota-
English) vocational training program, designed to teach
building trades and secretarial skills to young adults
on the Pine Ridge Indian Reservation at Kyle, South
Dakota, who, because of their inability to communicate
in the English language and their low skill levels
were unemployed or underemployed, resulted in bringing
40 full-blood Lakotas into the labor market. Vocational
training was augmented with a classroom curriculum of
basic mathematics, English (emphasizing vocabularies
needed in building trades and secretarial work on the
reservation), assertiveness training and verbal
communication skills, and employability skills (how
to apply for work, manage money, and complete forms).
Trainees worked from 9-4, Monday through Friday and
earned up to $2.30 per hour for participation. The
final program report includes: (a) Midterm Progress
Performance Reports for the periods, 8/1/77-1/15/78
and 8/1/78-11/17/78 detailing activities, accomplish-
ments, problems and evaluation procedures, (b) evaluation
tools, tests and test results, (c) unique materials
developed for the program (a 36-page Bilingual.Clerk-
Typist Handbook, Groundrules for Building Trades
Trainees, and a Theory of Sioux Post-Secondary Education),
(d) data sheets on fifteen male and female building
trades graduates, and (e) correspondence and dissemination
efforts.

The Crystal City Independent School District Bilingual Vocational Training Program was designed to provide business/printing education, auto mechanics, and industrial construction competencies to trainees exhibiting interest in these training areas. The participants were adults who were underemployed or unemployed in the community of Crystal City, Texas, the home base of an extremely high migrant Mexican American population. The program of instruction consisted of combined and coordinated related instruction with on-the-job training experience. During the period between September 1977 through May 1978, training was offered in two skill areas: (a) academic component, including computation and communications skills, and (b) vocational component, including skills in business and printing occupations. Concentration was placed on training individuals in secretarial/clerical and printing office machine skills. An advisory council selected fifty participants from the 200 adults who applied for the program. Seventy-two percent of the trainees were placed on jobs and/or motivated to pursue a college education. Seventy-five percent achieved the program's overall objectives, including demonstration of communication skills in both Spanish and English. Each trainee received counseling and instructions in job applications. The program was termed a success by program administrators.


Using a non-technical presentation, this handbook shows how computer analysis of job-relevant text materials can be used in developing language instruction for limited-English-proficient students. Using a practical approach, the handbook is designed to help the ESL instructor coordinate activities with the vocational curriculum. In addition procedures for obtaining and using various types of text analysis are provided. These special applications of data processing to functional language teaching are appropriate to developing materials for native speakers of English whose language skills may need to be strengthened. The handbook provides forewords for each potential user: The ESL/English Instructor; the Administrator; and, the Vocational Instructor. The handbook was designed to answer three fundamental questions: a) how can English language skills needed for success on the job be taught more efficiently and effectively?, b) how can the time spent on lesson planning be shortened?, and
c) how can the instructor or administrator with no prior experience use existing computer resources to accomplish the preceding goals? The handbook was field tested with instructors who had never used computer resources before. Their unanimous conclusion was that imagination was the only limitation on the potential uses for the information produced by the computer.


This bibliography provides the teacher of adult limited-English speakers with a list of the books which are available to help them learn English. The focus is on the adult who is interested in immediate employment or vocational training in English. Materials written for college or university-bound adults are not included. A list of articles, books, and bibliographies have been compiled which may assist the instructor in preparing activities for his adult ESL students. The bibliography is divided into the following parts: (a) ESL texts, (b) supplementary materials - vocational education, (c) supplementary materials - employment and survival skills, (d) pronunciation materials, (e) ESL tests, and (f) teacher aids.


To assist the youthful learner of English-as-a-second language in dealing with help-wanted ads and employment agencies, a series of dialogs, comprehension questions, readings, and points of discussion are presented. The text is illustrated with sample forms.


The coming challenge is to equip supervisors and managers with the requisite skills to manage a multilingual, multicultural workforce effectively. This includes training of people entering the United States from other nations, and also Americans working in other countries.
Objectives of this second-year program conducted at a community college skill center were to recruit individuals of limited English background and provide them with academic and vocational training to prepare them to enter and advance in occupations, using parallel courses in Spanish (e.g., English-as-a-second language) to achieve this goal. Students recruited were offered career and placement counseling, language instruction as needed, basic job-related communication and computation skills, and training in the following programs: (a) industrial sewing machine repair mechanic, (b) industrial sewing machine operator, radio and television repair technician, ophthalmic dispensing technician, building trades, cash register management, clerical business office procedures, general education diploma (GED), and English-as-a-second language/job-related-English (ESL/JRE). The skills center staff developed much of the curriculum and used an individualized approach to instruction. Negotiations were begun with other local agencies to provide training on a limited basis. The program had 1,099 enrollees, 878 of whom graduated, with 651 gaining employment. (A third-party evaluation of the program is included in the appendix, along with a graphic presentation of the instructional model).


This monograph details common factors and practices which have contributed to the successful outcomes of nine existing bilingual vocational training (BVT) programs recognized for their evidence of success. The monograph provides directors of bilingual vocational training programs and others with base-line information needed for planning and implementing a bilingual vocational training program. The nine BVT programs studied included eight activities: 1) team teaching and team planning, 2) incorporation and sequencing of instruction in job-related English language skills with vocational skills, 3) job placement and follow-up, 4) awareness and teaching of similarities and differences of cultural patterns, 5) instructor/trainee interactions, 6) coordination of counseling and job development, 7) staff consensus in the selection of vocational and language materials, and 8) instruction in survival skills for the work place. Successful practices found in BVT programs studied indicated that the need for job-related
English-as-a-second language (ESL), training has been recognized and trained staff have been employed to teach ESL, that job-related ESL training is functionally tied to vocational skills training, and that vocational skills training is derived from a labor market survey and adequately trained personnel are employed to teach these skills.

Eleven criteria were used to determine the quality of a bilingual training program (e.g., job placement rate, trainee recruitment, institutionalization). Counseling and cross-cultural training were important features of successful BVT programs, especially in helping trainees understand job-related and culture-related protocols. On-the-job practice was an important aspect of successful BVT programs. The monograph discusses the range of possibilities for preparing and placing out-of-school youth or adults of limited English-speaking ability in the job market. Recommendations are provided on planning, needs assessment, staff qualifications, staff development, counseling, full-time staff appointments, cross-cultural training, vocational instruction, ESL instruction, Advisory Committee, follow-up and feedback, job placement, duration of program support, community and business support.


Designed to provide planning assistance to administrators and staff who offer vocational instruction to persons of limited English proficiency, this guide focuses on three components of a successful program: (a) vocational instruction, (b) language instruction, and (c) support services. The first two chapters address the questions of why these programs should be provided and how to determine local needs for them. The third chapter shifts the focus from why to how, including methods of instruction and presenting a hierarchy of delivery forms for each component. A description of program types discusses the coordination of content and timing between the chosen forms. The chapter on local resources addresses problems of utilizing staff materials and facilities from monolingual vocational programs to develop a bilingual program. The final chapter summarizes on-going planning considerations and continued needs for data collection and evaluation with regard to recruitment, funding, financial aid, State coordination, follow up, and testing, and emphasizes the need for communication between students, staff, community, and administrators. An appendix presents brief descriptions of various types of programs and their implementation, with a contact person for each.

Describes some of the occupational, social, and emotional difficulties of Korean immigrants in the United States. Explains the need for bilingual education and recommends bilingual education strategies for Korean adults and children.