A BILINGUAL CAREER EDUCATION MODULE

DISSERTATION

Presented to the Graduate Council of the North Texas State University in Partial Fulfillment of the Requirements

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By

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This study was designed to determine if a bilingual career education module could be developed for predomi-
nately Spanish-speaking students. Data to justify the need for this type of career education module were gath-
ered after a review of existing materials and literature in the areas of bilingual education, career education,
and vocational education.

This study is divided into five chapters. Chapter I depicts the clarification and necessity for a bilingual
career education module. Chapter II reviews the litera-
ture in vocational education, career education, and
bilingual education to depict their importance in the
development of a bilingual career education module.
Chapter III is composed of twelve bilingual career edu-
cation clusters to include construction trades; industrial
production and related occupations; office occupations;
transportation occupations; art, design, and communica-
tion occupations; service occupations; health occupa-
tions; sales occupations; education and related occupa-
tions; scientific and technical occupations; social
service occupations; mechanic and repairing occupations.
Each cluster includes five bilingual job descriptions,
vocabulary and interest questions to be used by the
Chapter IV contains a four part formative evaluation design. Context evaluation, input evaluation, process evaluation, and product evaluation are the main components of this formative evaluation design.

The findings of this research indicated that there is a paucity of materials that blend career education theory with bilingual education theory. Current education practices in career education can be applied to the development of a bilingual career education module. Current teaching theory in bilingual education could be applied to the development of a bilingual career education module. Current teaching methodology in bilingual education could be applied to the development of a bilingual career education module. Formative evaluation techniques would be useful in the development of a bilingual career education module.

It was concluded that the development of a bilingual career education module for use by students who speak predominately Spanish would be beneficial for both educators and students. The development of a bilingual career education module could be strengthened by using current educational practices employed in monolingual career education modules.
TABLE OF CONTENTS

Chapter

I. INTRODUCTION .................................. 1

Statement of the Problem
Statement of the Purposes
Research Questions
Background and Significance of the Study
Definition of Terms
Procedure
Program Description
Overview
Limitations
Delimitations

II. REVIEW OF THE LITERATURE ................. 27

Introduction
History of Vocational Education
Directions in Career Education
Directions in Bilingual Education
Summary

III. BILINGUAL CAREER CLUSTERS ............... 49

Construction Occupations
Industrial and Related Occupations
Office Occupations
Transportation Occupations
Art, Design, and Communication Occupations
Service Occupations
Health Occupations
Sales Occupations
Education and Related Occupations
Scientific and Technical Occupations
Social Service Occupations
Mechanic and Repairing Occupations

IV. EVALUATION AND METHODOLOGY ............ 250

Context Evaluation
Input Evaluation
Process Evaluation
Product Evaluation
CHAPTER I

INTRODUCTION

According to figures in the Digest of Educational Statistics for 1977-1978, 7.6 years is the median number of school years completed in Texas by persons twenty-five years of age and over with an Hispanic-American heritage (10, p. 15). Texas is placed as the lowest of the fifty states in comparing the median school year completed by persons of Hispanic-American heritage twenty-five years of age and over. For Blacks 9.3 is the median school year completed, while for Anglos 12.0 is the median school year completed. Thus, in relation to other groups within the state, and in relation to the same ethnic groups of other states, Hispanic-Americans rank lowest in comparing the median number of school years completed by persons twenty-five years of age and over (4, p. 15).

In its 1976 report to Congress the United States Office of Education stated that shortages of suitable bilingual curriculum materials had hindered the success of bilingual programs throughout the country (14, p. 13). Three national projects have been funded by the Office of Education to develop, acquire, and disseminate bilingual materials. These projects are the Spanish Curricula Center in Miami, Florida; the Materials Acquisition Project in San Diego, California;
and the Dissemination Center for Bilingual-Bicultural Education in Austin, Texas. However, career education is not mentioned as one of the target subject matter areas being developed (4, p. 21). As of August, 1979, personal interviews with bilingual education authorities at the Dissemination Center for Bilingual Education in Austin, Texas, reinforced the fact that bilingual career education materials on the secondary school level are not readily available. Thus, there were no bilingual career education materials to be reviewed.

In recent years education has been committed to the ideal development of each student through general education. At the same time vocational and technical education has been demonstrating its ability to contribute to the economic growth of the country. Infused models of career education are now seeking an increased emphasis in both vocational and academic educational settings. Bilingual career education is a tool to successfully integrate Hispanic-Americans into the American economic system.

Human resources are one of the most precious national assets. Career education for bilingual students would be an investment which would provide a high rate of return for the individual and for those with whom the individual might come in contact.

When the members of one ethnic and linguistic group are exposed to the values and thinking of another, biculturalism is added to bilingualism. In the world of work there are
new concepts and words to be shared with the Spanish-speaking student (19, p. 66). Those Spanish-speaking students with the most severe lack of knowledge of the American world of work are those who have most recently come to America and who do not speak English.

The Spanish-speaking student, residing in America and retaining the work values of his own culture, should be aware of the work values of the American culture. At the same time one should be conscious of one's value as a potential bilingual employee in the American labor market.

Statement of the Problem

The problem of this study was to develop a bilingual career education module to be utilized in the American Southwest in a classroom where English is a second language in a secondary school in either a vocational or a general educational setting.

Statement of the Purposes

The purpose of this study was to

1. Collect, organize and make available to non-English-speaking high school students bilingual career education materials written in both Spanish and English.

2. Develop an introduction to the twelve career clusters: construction occupations; industrial occupations; office occupations; transportation services; art, design and communications; service occupations; health occupations;
sales occupations; education and related occupations; scientific and technical occupations; social service occupations; and mechanic and repairing occupations.

3. Formulate examples of five job descriptions within each cluster which would include appropriate vocabulary in Spanish and English.

4. Demonstrate the utility of formative evaluation through the development of a bilingual career education module.

Research Questions

The research questions raised by this subject were these:

1. Is current career education theory applicable to the development of a bilingual career education module?

2. Are current educational practices in career education applicable to the development of a bilingual career education module?

3. Is the history of vocational education from 1917 to the present relevant to the development of a bilingual career education module?

4. Is current teaching theory in bilingual education applicable to the development of a bilingual career education module?

5. Is current teaching methodology in bilingual education relevant to the development of a bilingual career education module?

6. Are formative evaluation techniques useful in the development of a bilingual career education module?
Background and Significance of the Study

The adequacy of one's preparation for life is an area of concern. The educational level of the average Hispanic-American is inadequate for the needs of an urban-industrial society (15, p. 22).

According to the General Social and Economic Characteristics of the 1970 Census of the United States Population, the median of school years completed for males of Hispanic-American heritage twenty-five years of age and over was 9.9 years. The median of years completed for their female counterparts was 9.4 years. This figure would average to 9.7 years completed for both males and females of Hispanic-American surname (9, p. 386).

Interviews with authorities in bilingual education at the Bilingual Education Dissemination Center and the Texas Education Agency in Austin, Texas indicate that due to lack of federal funding for bilingual secondary education, the greater part of the populations that have been targeted to receive bilingual education materials are in the elementary schools. The subjects receiving the bilingual curriculum emphasis are the academics, not career education (15, p. 36).

Ever since the Hispanic-Americans won the campaign for a bilingual-bicultural education bill as an amendment to Title VII of the elementary and Secondary Education Act of 1965, the impact of federal funds has been evidenced in
bilingual education projects (15, p. 36). There are several exemplary projects in Texas, California, and Florida (4, p. 17).

The Dissemination Center for Bilingual-Bicultural Education in Austin, Texas was formed to serve as a clearinghouse for bilingual-bicultural materials and services relevant to Title VII projects. The Materials Acquisition Project in San Diego, California was formed to locate and disseminate Spanish and Portuguese instructional materials published in foreign countries for elementary and secondary grades. The Spanish Curricula development Center in Miami, Florida was begun in 1970 to develop curricula to support primary level grades (1-3) in Spanish-English bilingual education programs (15, p. 36).

Yet, today schools are still turning out Hispanic-Americans who lack marketable job skills. All too often students are graduated who cannot be counted as literate in either Spanish or English. Many can only expect to enter an unskilled job that will provide a miniscule paycheck and few personally satisfying rewards (3, p. 16).

The unemployed and underemployed know many of their problems. They know that they lack marketable skills; they know they lack an education; and they know that they cannot take advantage of whatever opportunities that may occur (15, p. 22).
Perhaps the greatest effect of the Bilingual Education Act has been to focus attention on the fact that the student who comes to school with a native language other than English does stand in need of special instructional treatment. The lack of instructional materials has resulted in a growing awareness among educators of the important body of theory and method which exists for teaching English-as-a-second-language (19, p. 4).

Today most curriculum materials have been designed for the primary grades. Very little attention has been paid to bilingual materials for high school students, especially in relation to career education materials that reflect the American work ethic.

This researcher discovered that the non-English-speaking student is at a distinct disadvantage when exposed to career materials presented only in English. The researcher designed and presented career workshops in a secondary school classroom. As a result of this activity the need for bilingual career education materials was discovered when numerous students were unable to understand the spoken or written information.

Though there is material available for bilingual programs, much that is available comes from English translation; or the materials are directly imported from the Spanish-speaking countries and do not fit well into the socio-cultural context of the Spanish Southwest (26, p. 23). As these
imports from South America or Spain do not fit, they seem unrealistic to the student. It is necessary to offer the bilingual student of high school age the vocabulary and tools needed in the world of work (24, p. 22).

The attention span possessed by bilingual students needs to be considered when assessing and designing materials to use with them. As with most disadvantaged groups, their response to a diversity of approaches would be more positive than their response to one approach. Many bilingual materials can be produced by those directly involved with the students, for then the materials can be assured of being designed adequately for the populations that they are intended to serve (21, p. 24).

There is little reason to learn another language just for the sake of learning it. The bilingual program should be aimed at developing a sense of self-worth as well as teaching subject matter along with the second language (3, p. 16).

The advanced technology and rapidly evolving patterns of employment in the second half of the twentieth century call for vocational and semi-professional programs vastly different from those of the past. Computers, electronic science, rapid transportation, and advanced business systems demand specialized training which in most cases is now being provided by on-the-job training, because it is not being made widely available in secondary schools (3, p. 17).
Since the Lawyers' Committee for Civil Rights Under Law was established in 1963, litigation and research concerning equal educational opportunity have been major endeavors. Bilingual education issues were addressed by the federal courts. In 1974 the rights of students attending federally-assisted schools were examined in Lau v. Nichols in California, 414 U.S. 563 (1974) and Serna v. Portales in New Mexico, 499 F.2d 1149 (10th Cir. 1974) (1, pp. 2, 3).

That school districts having a larger number of non-English-speaking minority students must provide either a bilingual program or an English-as-a-second-language program was held by the court in Lau v. Nichols. The Serna v. Portales case relied on the Lau case, and the courts affirmed a trial judge's discretionary power to order bilingual instruction for non-English-speaking minority groups (11, p. 23).

Career education offers the bilingual student, through its stated goals, a unique approach to instruction. Usually these students are not proficient in either language. Because they feel different and comprehend little, they begin to feel insecure in coping with the school environment. They mostly identify with family and other Spanish speakers. In fact, if the sympathetic teacher used little English with them, they might possibly exist in a totally Spanish-speaking environment where there are limited English models for them to follow (3, p. 15).
Bilingual career education information has implications for vocational education. A bilingual career education module presented in a general high school class might influence the enrollment of the vocational education program in that particular school setting. Often new students in a secondary school are under sixteen years of age and are unfamiliar with vocational education programs. A student who does not speak English is at a distinct disadvantage in a secondary school setting, because he is not aware of the range of choices and opportunities that are open.

After being involved in a bilingual career education module through another class such as English as a second language, the non-English-speaking student would have an opportunity to receive information about various jobs; and might be encouraged to seek further information about vocational programs within the secondary school setting. Older foreign students who enter public schools when they are over sixteen years of age would be even more inclined to enroll in vocational education, as their need to work is greater than that of the younger students.

Bilingual career education information could be very influential in determining which vocational classes in a school vocational program a student may choose. Bilingual career education information is important to non-English-speaking students enrolled in vocational classes in a school where all of the classwork is in English. The vocational
education instructor would find information given in a bilingual career education module to be helpful, especially in working with a vocational student who does not speak English.

Bilingual career education can provide a vehicle to fuse these students into the American culture while still maintaining the essence of their own ethnic identity. Students can be exposed to capable people of their own cultural background who have proven themselves successful in varied economic roles. While students receive positive reinforcement regarding their own language and culture, they can begin to have an appreciation of other cultures from the involvement of business and community people, which is an integral part of career education activities. It is natural that bilingual and career education should be coordinated (3, p. 16).

Career education is more than a technique. It is a broad concept concerned with the whole life of the student including his educational, vocational, recreational and leisure time activities. It has the potential for bringing a sense of relevance to education, for it relates the educational experiences to the realities of life. Students should be introduced to the widest variety of career options as soon as possible, so they will have the most equal chances to develop their talents. Career decisions should be based upon competent guidance and an organized program design, not by chance. This fact is
particularly true for the student who understands very little English. If the career education material is not presented bilingually, career orientation might not take place (3, p. 16).

The self-concept of the bilingual students may also be enhanced by career education activities. The types of experiences provided indicate that people are unique and important, regardless of background or knowledge (3, p. 17).

The career education concept can teach both languages as well as develop an awareness in the students of bilingual skills needed in various occupations. The outcome visible to the educators after working with the bilingual student would be the ease with which one can work and cope within the reality of two cultures.

**Definition of Terms**

**Bilingual Education** is defined as the curriculum taught in Spanish and English on an equal basis. A sentence is spoken in Spanish, and then it is spoken in English. A sentence is written in English, and then it is written in Spanish.

**Bilingual Methodology** is defined as instructions and activities presented to teachers and students so that the instructions and activities may be taught and learned in more than one language.
Career Education will be defined as the teaching of the general knowledge of careers and job information as it is infused into the general curriculum.

ESL Students will be defined as those students for whom English is a second language. They are determined on the basis of a score of the Language Assessment Scales, Level II, which is a test of English language proficiency, adopted by the Texas Education Agency as a language evaluation instrument.

Hispanic-Americans will be defined as those students currently residing in America for whom English is a second language and Spanish is the dominant language. It is understood that some of these students may have been born in countries other than Mexico.

Module will be defined as a standard or unit employed in presenting a plan or design, usually on a small scale.

LAS (Language Assessment Scales), Level I (K-5), Level II (6-12). The LAS is divided into five sections and makes use of a pre-recorded cassette. On the first four sections, the administrator records in writing the correctness or incorrectness of the student's responses in these categories: (1) the repetition of words and short sentences; (2) distinguishing between minimal pairs (cup or cop); (3) naming objects in pictures; (4) comprehension of sentences referring to pictures; (5) storytelling with reference to pictures (the student hears a story and is then asked to tell the same story in his or her own words). The story is recorded
verbatim in writing by the examiner for later analysis (22, p. 29).

Procedure

Various research designs were studied in approaching the problem of developing a bilingual career education module. A formative design as defined by Scriven (21, p. 43) and clarified by Stufflebeam (7, p. 250) was selected as most appropriate. This type of research is described as process research by Scriven. It is the evaluation of the intermediate stages of development of the teaching instrument, rather than focusing the evaluation of learning changes on the final product only as in summative evaluation.

This type of evaluation requires a formative research design. As applied to the present research, a formative design involves outcome evaluation of intermediate stages in the development of bilingual education career module. The role of formative evaluation is to discover deficiencies and successes in the intermediate versions of the program.

A search of the literature has revealed no published research in bilingual career education modules. No standardized instrument exists which can be used as a reliable pre- and post-test of knowledge of the career clusters or the jobs within them. To control all the variables that might affect students' abilities in these areas over the period of time that the module would be presented would be impossible. To offer the information of job opportunities to one group
of students and to deny such a needed service to a second group in order to maintain a control group negates the very purpose of the information offered (8, p. 12). Using a formative design for evaluation in developing a bilingual career education module for students in secondary school was deemed to be most appropriate.

In order to systematically plan, implement and evaluate the program, four types of evaluation were used: context evaluation in designing an introduction to the career clusters for a population that does not speak English, input evaluation in setting up the program, process evaluation as the basis of modification and change as the material is used, and product evaluation to determine whether or not the program accomplished its objectives.

This particular format is recommended by Burns, who worked with Spanish-speaking college students in a monolingual career development module (8, p. 12). It would be applicable to a bilingual career education module as well. Formative evaluation as defined by Stufflebeam and refined by Burns consists of context evaluation, input evaluation, process evaluation, and product evaluation.

Context evaluation provides a rationale for the determination of objectives. It defines the relevant environment, describes the desired and actual conditions pertaining to that environment, and identifies unmet needs and unused opportunities (8, p. 13). In the present research, context
evaluation includes a description of the background of the Spanish-speaking students at North Dallas High School in Dallas, Texas. Context evaluation is utilized to identify the need for an introduction to the career clusters for this particular group of students and to set forth the objectives of such a program.

As applied to this type of research, formative design involves the use of context evaluation and input evaluation in creating the reasons for and designing the implementation of the module. The context evaluation as employed by Burns is the definition of the relevant environment, the desired and actual conditions pertaining to that environment, and the unmet needs of or unused opportunities for students of Hispanic surnames (8, p. 13).

In the present research, the context evaluation is considered in depth in the review of the literature. The historical background of bilingual education, vocational education, and career education is explored and described.

Input evaluation has been used when assessing all of the factors which must be considered in designing and implementing the module. Input evaluation includes all of the factors which must be considered in designing and implementing a program. In evaluating the alternatives for the format to be used in this program, the researcher employed parts of previously utilized original
career material that had been formerly used in a secondary school, specifically North Dallas High School in Dallas, Texas.

One of the most important aspects of input evaluation for this project is the researcher's discussion with co-workers concerning details such as time schedules, room arrangements, procedures and strategies to be used, potential problems which might be encountered, and the relevance of the procedures to the objectives of the program. The researcher must consider possible alternatives in each of these areas. The decisions made should be based on a knowledge of group dynamics and career development theory, on previous experience in working with secondary school students in general and especially on the experience gained in working with Spanish-speaking students in a similar monolingual program the previous year. Most of the factors that must be considered in designing and implementing a program are considered in input evaluation.

The researcher has utilized parts of previously employed career material in a secondary school setting with students who did not speak English. As a result of previous experience the researcher determined that group sessions that would allow for interactions among group members would be the most effective way to introduce students to the career clusters. The researcher presented part of this material at the Texas Personnel and Guidance Association Convention, 1978; the

The formative design used in this research project calls for process evaluation of the bilingual career education module as each cluster is presented. Process evaluation is a means of detecting or predicting defects in the procedural design or its implementation (8, p. 14). Some of the strategies followed in the process evaluation were these:

(1) To identify and monitor continuously the potential sources of failure such as interpersonal relationships among staff members and students, communication channels, logistics, understandings of an agreements with the intent of the program by persons involved in and affected by it, adequacy of the resources, physical facilities, staff and time schedule.

(2) To note the main features of the program design such as concepts to be taught, amount of discussion to take place, and the description of what actually takes place.

In the present study, provision is made for process evaluation in the following manner: the leader or leaders should note in detail after each session the participation of the group members, the effects of the physical surroundings, the effectiveness of the leadership, the adequacy of time allotted for various parts of the program, and any new problems which may occur. Recommendations for changes in plans for the ongoing group should be written into plans for remaining sessions. Changes recommended for future
groups should be noted to be included in any revisions of the design.

Product evaluation as interpreted by Burns and defined by Stufflebeam assesses attainments at the end of the project cycle and as often as necessary during the project term. As a part of the product evaluation, answers to the following questions can be sought:

(1) Were the objectives of the program met? That is did students become aware of the existence of the various career clusters and various jobs within them? Were they able to apply learned decision-making skills to their own interests and aptitudes?

(2) What were the characteristics of the students who failed to participate or to reach the program objectives?

(3) Did the leader behavior contribute to the success of the group?

(4) Were the facilities adequate?

(5) Was the time schedule satisfactory for the leaders and the participating students?

(6) Did the students have a positive attitude towards the process of bilingual career education?

(7) Did the students feel that the amount of time spent was adequate?

(8) Which activities included in the program brought a positive reaction from the students participating?
These four types of evaluation, as applied to a bilingual career education module, allow for the flexibility necessary in developing materials for Spanish-speaking students. The results and recommendations for future career education modules with other ethnic minority groups are included for future researchers who would be interested in expanding the applicability of this particular format.

Program Description

An introduction to the career clusters is presented, with objectives and activities designed for Hispanic-American students who speak only Spanish. The objectives are sensitive to the needs of these students. The curriculum content is relevant, for career education relates learning to the realities of life and work.

The teaching strategies are consistent with educational objectives important to students who need boosts in self-esteem. The teaching strategies are also consistent with current developments in curriculum design and teaching methodology (16, p. 31). Litsinger has successfully used methods similar to these in the development of social science units.

The learning strategies and concepts have been tried in classrooms previously. Specifically, the researcher has used these techniques in presenting career information workshops in a high school setting in both vocational and general classes. The technique used in organizing and implementing
the program is oral, with explanations given in the dominant language if necessary.

Overview

The bilingual career education module consists of twelve separate units to be used during a two-week period or spread out through a semester. Each unit contains material to fill a fifty-five-minute class period. Each unit is written to be presented in Spanish and English.

Each instructional unit consists of the following:

I. Objectives of the unit

II. Introduction to the specific career cluster, i.e., construction trades
   A. Training
   B. Wages
   C. Environment
   D. Personal qualifications
   E. Questions for the student to ask himself concerning interest and aptitude

III. Five job descriptions
   A. Vocabulary strategic to understanding
   B. What is done on the job
   C. Training for skill
   D. Wages
   E. Outlook

IV. Decision-making strategy

V. Suggestions for group activities
This type of career education curriculum was presented in staff development workshops for the Dallas Independent School District, the Texas Personnel and Guidance Association, the American Vocational Association and the American Personnel and Guidance Association in 1978-1979.

The sources of information for teachers and students include multimedia teaching resources suitable for students who are learning English. Both the content and teaching strategies encourage bicultural activities and learning. For instance, jobs where a bilingual person would be an asset are emphasized within each cluster. Appropriate teaching resources produced in Spanish as well as English are included.

Each section emphasizes key words in English associated with the career cluster and jobs within. Each section includes activities to aid the student in assessing particular interests and abilities that may be appropriate to a particular cluster. The possibilities of utilizing the unit to motivate English language learning are explored.

The reading sections are presented in Spanish as well as English to facilitate teaching the content and conducting the strategies in both languages. Either the concurrent bilingual approach or the separate language approach may be used. In the concurrent approach a sentence is spoken in one language and then immediately in the other. In the separate language approach one language, the target language is used, with only explanations given in the primary language.
Limitations

Reports submitted by the local education agencies to the United States Office of Education contain a minimal amount of information on the strengths, nature and weaknesses of classroom activities in bilingual education. Statistics of the results of ongoing programs in bilingual education are difficult to evaluate as there are no guidelines. In order to encourage as many programs as possible, the federal government gave the local education agencies considerable latitude in their preparation of programs. Due to the lack of adequate evaluation reports on current projects, the evaluation of existing materials is somewhat subjective.

Delimitations

The Spanish used in the curriculum materials may dialectally fit into a Southwestern cultural milieu. Selected occupations described are more prevalent in the Southwest.


CHAPTER II

REVIEW OF RELATED LITERATURE

Introduction

The literature reviewed reflects three major areas: vocational education, career education and bilingual education. The historical perspectives of vocational education, career education, and bilingual education and the theoretical orientations of vocational education, career education, and bilingual education which influenced the formation of the present research problem are reviewed in this chapter.

History of Vocational Education

The growth of vocational education in this country paralleled the emergence of the industrial revolution. As the United States developed into an industrial nation from an agrarian economy, great changes were taking place, socially, culturally and educationally. National legislation relating to education mirrored many of these changes. The historical development of the federal role in education as it applies to the individual is necessary to fully understand the importance of vocational education in the lives of citizens today (10, p. 32).

There was little federal involvement in vocational education before 1900. The Morrill Act of 1862, the first
legislation passed by the federal government in support of vocational education, granted 30,000 acres of land to each state for every senator and representative in Congress. Income from the sale of those lands by the states would be used to build agricultural and mechanical colleges. This act was a precedent in establishing the federal government's involvement in education (7, p. 10).

The industrial revolution produced a decline in the classic apprenticeship system. The United States was producing citizens who were largely unskilled, less than productive. It was too expensive for private industry to train so many people (10, p. 34).

The Smith-Hughes Act of 1917, Public Law 64-347 expanded federal assistance in agriculture, trade and industry and home economics. These funds were appropriated and perpetual in nature on ratios of state, urban and rural populations to the total national population. The Smith-Hughes Act provided controls for the use and administration of these funds by calling for the creation of a state board empowered to administer funds in cooperation with the Federal Board of Vocational Education which the act also created (10, p. 37).

The task of the Federal Board of vocational education was to make studies pertaining to the establishment of vocational schools and instruction in agriculture, technology and industry, commerce and home economics. The state boards were required to submit detailed yearly plans which would show how
the funds would be used. Annual reports by the states were also required. Education in these areas was to be provided by schools under public supervision in order to fit students for employment. This was the first support for vocational education at the secondary level (5, p. 177).

Other acts passed before 1960 in support of vocational education were the George-Reed Act of 1929, the George Ellzey Act of 1934, the George-Dean Act of 1936, the Servicemen's Readjustment Act of 1944, and the National Defense Act of 1958. All these acts attempted to improve the education of individuals through vocational training, thus bringing more skilled manpower into the workforce (5, p. 178).

After 1960 there were not enough trained technicians. College-educated graduates were not finding jobs easily. Problems of unemployment and underemployment were prevalent. The Manpower Development and Training Act of 1962 authorized funds to train unemployed workers and retrain underemployed workers (10, p. 42).

President John F. Kennedy appointed a panel to review and reevaluate federal laws in vocational education. Many of their suggestions are incorporated in the Vocational Act of 1963 (Public Law 88-210). With this act the federal government made an attempt to prepare students for work as well as college (10, p. 43).

Appropriations from the Vocational Act of 1963 were nearly 150 times greater than for the Smith-Hughes Act fifty
years earlier. Funds were to be used for: vocational education for high school, vocational education for post-high school students or dropouts, vocational education for the academically handicapped, socioeconomically handicapped or other types of handicaps, construction of area vocational education schools, and ancillary activities such as teacher training, development of instructional materials, leadership and evaluation (5, p. 245).

The Vocational Education Amendments of 1968 further committed the government to vocational education programs, research and training, exemplary programs and projects, residential schools, consumer and home economics education, cooperative vocational education programs, work-study programs, curriculum development, vocational leadership and development, vocational guidance and counseling, and programs for the handicapped who cannot succeed in a regular program (7, p. 255).

The Education Amendments of 1972 (Public Law 92-318) provided for the establishment of a Bureau of Occupational and Adult Education in the U.S. Office of Education. The 1972 Amendments also incorporated industrial arts into vocational education.

Directions in Career Education

The Educational Amendments of 1974 (Public Law 93-380) gave support to career education. Each state and local education agency should carry out a program in career education
according to the amendments. The Office of Career Education was established within the Office of Education. The National Advisory Council on Career Education was established to advise the Commissioner of Education on the development, implementation and evaluation of career education throughout the United States and to determine the need for future legislation (10, p. 52).

Under Section 406 of these laws the United States Commissioner of Education was authorized to undertake a program of career education. This section called for the establishment of an office of career education in the United States Office of Education, established a National Advisory Council for Career Education, directed the Commissioner to conduct a survey on the current status of career education, authorized the Commissioner to make grants to state departments of education to enable them to develop plans for the implementation of career education, and authorized the Commissioner of Education to support projects designed to demonstrate the most effective techniques of implementing career education, and to develop career education models. Fifteen million dollars per year for the years 1975-1978 was allocated. Only ten million was appropriated in 1975 and $10,135,000 for the remaining three years. In 1978 there were eighty-seven projects supported under the 1978 appropriation (39, p. xxiii). No bilingual students are targeted for these projects.
Career education is a relatively new concept when compared to vocational education. The definition of career education by Kenneth Hoyt, Director of the Department of Career Education, is comprehensive. Kenneth Hoyt states that career is the totality of work one does in his or her lifetime. Work is conscious effort aimed at producing benefits for oneself and others. Education is the totality of experience through which one learns. Therefore, career education is the totality of experiences through which one learns about and prepares to engage in the world of work. Work refers to all productive use of leisure time. Career is a developmental concept beginning in early childhood and extending past retirement (24, p. 34).

The individualistic goals of career education are to make work meaningful, possible and satisfying to each individual. The societal goals of career education are to help individuals want to work, acquire the skills necessary for work and engage in work that is satisfying (24, p. 33).

It is assumed that if students can see relationships between what they are being asked to learn in school and what exists in the world of work, they will be motivated to learn more in school (35, p. 45). Career education helps students learn basic skills required for success in the world and life—decision-making skills, skills in clarifying values and recognizing problems of human relations.
In a United States Monograph of the relationship between career education and vocational education, Kenneth Hoyt clarifies each (25, p. 15). Career education consists of those activities and experiences through which one learns about work. Vocational education consists of those activities and experiences through which one learns about a primary work role (25, p. 11).

Credit for coining the term "career education" and initiating the career education movement is often given to Sidney P. Marland, Commissioner of Education in 1971. Actually, James E. Allen in a 1970 speech before the National Association of Secondary School Principals may have coined the term.

It is the renewed awareness of the university of the basic human and social need for competence that is generating not only increased emphasis today on "career education", but a whole new concept of its character and its place in the total educational enterprise (5, p. 268).

Sidney Marland in 1971 addressing the National Association of Secondary School Principals proposed that a universal goal of general education in America be that every student completing school at grade twelve be ready to enter higher education or enter useful and rewarding employment. In 1971 he addressed the State Directors of Vocational Education and stated that a sound, systematical relationship between education and work which would make standard that each student be taught about occupations and the economic system would greatly aid in meeting the manpower needs of America (5, p. 269).
During 1971-72 the United States Office of Education began development of four conceptual models for career education. They were a school-based model and a rural-residential based model, an employer-based model and a community-based model. The USOE models for career education view the high school years as a period of career and decision-making (5, p. 134).

According to this model students would be made aware of the general nature of the world of work through exposure to broad occupational clusters which represent a classification system for more than 20,000 occupations. Career decision-making and general career skills are emphasized in meaningful high school career education programs.

There are several major viewpoints as to how career development and occupational choices are made. First and earliest chronologically is the trait and factor approach which can be traced to Frank Parsons, director of the first vocational guidance center in the United States and the father of vocational education. Individuals compare their abilities with those demanded by an occupation and agree on one they best match. An individual is organized in terms of unique patterns of capabilities and potentials (traits), and occupations can be described in terms of homogeneous qualities (factors). Thus, the trait and factor theory was named (5, p. 17)
Ginzberg's developmental theory states that occupational choice is evolved through stages in career choice behaviors such as fantasy, tentative, and realistic periods (5, p. 88). Ginzberg, in creating such a theory, was able to convey the idea that occupational choice is not a single decision, but a developmental process that takes place over six to ten years. Ginzberg's final conclusion is that occupational choice ends in a compromise—a balance between interests, capabilities and values and the opportunities and limitations of the real world.

Donald Super is considered an outstanding career theorist. He places great emphasis on developmental choice as a process stating that a person chooses occupations that allow him to function in a role that is consistent with his self-concept. The individual's self-concept is a function of his developmental history (5, p. 88).

These particular theories are found to lend themselves to school settings. Teachers and counselors can be familiar with these concepts without becoming involved in psychological or personality approaches to career education.

Many states and local school districts have initiated career education programs. It is impossible to determine how many are functioning with no federal assistance under the leadership of teachers, counselors and vocational instructors. For those students who cannot speak English career education is scant. At the secondary school level,
it is virtually non-existent in monolingual classrooms or English-as-a-second-language classrooms where the learning of English is the paramount objective. These students who do not understand English are not being given an opportunity to appreciate the dignity of work and acquire the ability to make wise decisions about career options and choices.

Directions in Bilingual Education

The status of bilingual vocational training as of 1977 indicated that there were three bilingual vocational training programs catering to a total of 248 persons. Crystal City, Texas, taught clerical skills and auto mechanics; San Antonio State Hospital taught clerical skills, food service and auto repair, and Texas Womens University taught emergency medical technology bilingually (11, p. 17). The programs had bilingual instructors who systematically introduced English into discussions, especially job specific words.

Unfortunately, there are few bilingual vocational education classes in which students can enroll. For those thousands of students in the general curriculum who do not have enough knowledge of English to communicate that they would like to enroll in a bilingual vocational education class, an experience in a bilingual vocational education class would be unlikely. These students may drop out or graduate without being fully aware of the opportunities of vocational training, either in bilingual or monolingual settings (11, p. 25).
These students enrolled in general courses must rely on their English-as-a-second-language class in high school to impart to them the most essential ingredients of a general education. Bilingual career education may be a determining factor in accommodating into the United States workforce those students who immigrate to the United States in their late teens striving to learn as much as possible of America in a very short time.

The English-as-a-second-language classes are conducted under the auspices of bilingual education. When compared to vocational education, the movement toward both career and bilingual education is relatively recent. Most career education and bilingual education programs were begun after 1970, whereas there have been vocational education programs in existence since the Smith-Hughes Act (8, p. 239).

The number of Spanish-speakers living in the United States was officially figured at 11.8 million in 1976. Of the eleven million accounted for in the United States Census of 1976, 6.6 million were Mexican-American, 1.8 million were Puerto Rican, and 2.4 million were Cuban, Central American, and South American (43, p. 150). Spanish-speakers have been able to maintain a variety of linkages with their mother countries while adapting to the American environment. They are complex as individuals and as a group. Some have renounced their cultural and linguistic heritage while others cling to their cultural beginnings and first language (11, p. 4).
Yet despite vitality, Spanish-speakers continue to do poorly in American schools. They have the highest dropout rate in the United States, excepting Native Americans (33, p. 198). Because of these setbacks, parents and leaders of the Spanish-speaking community continue to press for bilingual education as a means of obtaining a better education for their children (33, p. 198).

Directions in Bilingual Education

The United States experience with bilingual schools falls into two different periods, pre-1914 and post-1963. Those elementary schools founded before 1800 were elementary, mostly parochial in German, Dutch, Scandinavian and French. They were non-English schools where English was taught as a subject (3, p. 29). With World War I tolerance for foreign language instruction disappeared and xenophobia and isolationism began (38, p. 84). The first public bilingual school was founded in 1840 in Cincinnatti (4, p. 32). To attract German students to public schools the state of Ohio passed a law in 1840 making it the duty of the board of trustees to provide schools where German was taught as a subject. German was used extensively in American schools from 1840-1919, especially in the midwestern states. During this same timespan, French was used as an instructional language in Louisiana and Spanish was used in New Mexico (4, p. 430).

As a result of the Americanization movement in the decade from 1913-23, thirty-four states passed laws requiring English
to be the language of instruction in the public and private schools. Thus, the schools would serve as a melting pot to transmit the means to participate in and contribute fully to American life. This same rejection of alien cultures and languages in favor of everything American carried through the World War II period (4, p. 431).

Significant educational advances were made in bilingual education in the 1950's and 1960's. The theoretical and practical contributions of linguistic scientists, the promotional work of the Foreign Language Program of the Modern Language Association paved the way for the National Defense Education Act of 1958. This resulted in a partial recovery of foreign languages, but no suggestion of bilingual education until 1963 (4, p. 432).

In the Coral Way Elementary School, Dade County, Miami, Florida, the contemporary period of bilingual schooling in the United States began (4, p. 428). The first three grades were given the option of an all English program or a bilingual program where half the teaching would be done in Spanish by experienced teachers. By the end of the first year the preference for the bilingual program was so strong that all English curriculum was dropped. Many programs were begun in Texas before 1968, but without the Bilingual Education Act they might not have prospered. The senior senator from Texas, Ralph Yarborough, introduced this bill to Congress, and it was signed into law by President Lyndon B. Johnson (4, p. 429).
The forces that helped to explain the passage of this act can be found in social context. During World War II most servicemen experienced linguistic shortcomings or had to undergo intensive foreign language training programs. They returned from Europe and Asia convinced that America needed to repair this deficiency for the next generation (38, p. 90).

Only out of concern for the national defense did the government begin stimulating foreign language programs in the late 1950's, especially for college students and adults. Programs for young children began in the 1960's. The first modern bilingual program in Florida was established by a grant from the Ford Foundation. The program was designed for Spanish-speaking Cubans and for Anglos (38, p. 92).

The National Education Association Convention in 1966 focused on the improvement of elementary schooling for Spanish-speaking children in the Southwest. The Association recommended that preschool and lower elementary classes be conducted bilingually and that Mexican cultural traditions should be fostered so that students would take pride in their ethnic identity (4, p. 439).

As a result of many similar studies and much politicking by concerned statesmen the Bilingual Education Act became a federal statute under Title VII of the Elementary and Secondary Education Act of 1967. The act authorized appropriation of funds to develop special instructional materials for use
in bilingual education programs, provide in-service training for teachers and counselors, and establish, maintain, and operate special programs for children of limited English-speaking ability (38, p. 85).

By enacting the Bilingual Education Act of 1967 Congress provided official endorsement of the concept of cultural pluralism. To develop the skills and concepts of children in their first language is of primary importance. (3, p. 31).

As of 1971-72 there were 183 bilingual education programs supported by this act serving 86,154 children. There is continued controversy over bilingual education programs and how they should be designed (3, p. 102).

In 1974 the movement for bilingual education produced a landmark decision in the case of Lau v. Nichols. The Court reiterated that there "is nothing less equal than the equal treatment of unequals". Though the Supreme Court did not specify bilingual education as the vehicle to provide a meaningful education to non-English speaking students, subsequent lower court cases have indicated that it should be (21, p. 10).

In the case of Serna v. Portales Municipal Schools, 199 F. 2d 1147 (1974) the circuit court stated that a student who does not understand the language of instruction must be provided with a bilingual education. The right of the court to prescribe a curriculum was clearly established (21, p. 10). The court said that when a substantial group was being deprived, a Title VII violation would exist.
Aspira v. the Board of Education of the City of New York (394 F. Supp. 1161 1975) was concerned with who was to receive bilingual instruction. All students should be given a test to determine English proficiency. Those who fall below the twentieth percentile, and who come from an Hispanic background should be given another test in Spanish. If their Spanish percentile score is higher than their English, they should be given another test in Spanish. If their Spanish percentile score is higher than their English, they should be given bilingual instruction (21, p. 18).

What is envisioned is a program which eases a student through transition in the home language into English as quickly and with the least amount of difficulty possible. It is important to note that no one has been given the right to a bilingual education. Language as well as race is to be eliminated as a tool in the discrimination process. In implementing these problems it is possible that a non-English-speaking population be so small that its educational problems would be ignored (21, p. 20).

Texas state law requires that bilingual education be available in grades K-3 if a school district has more than twenty students in a grade who do not speak English. The state will provide $25 per student for materials to the school district if the school district chooses to have bilingual instruction beyond the K-3 mandatory program. The Dallas Independent School District, for example, extended its
program to the sixth grade in 1976. As of 1979-80 it spent $686,267.00 on bilingual education (13, p. 1).

Today there are over 600 federally funded bilingual programs in 43 states. They cover 20 languages. Last year, the United States committed $134,000,000 to bilingual education (12, p. 14A).

Bilingual education has become a political as well as an educational issue. Educators and politicians are divided over whether the main thrust of bilingual education is to teach students English or to help them maintain their foreign language abilities. Congressmen must decide how much tax monies should be used to preserve ethnic identities. Does the preservation of ethnic identity lead to divisiveness in American society (14, p. 4)?

In 1968 the federal government appropriated $7.5 million to bilingual education. Federal spending is proposed at $192 million in 1981 for bilingual education (14, p. 33). Bilingual education advocates maintain that still only 300,000 of 3.6 million age youth who do not speak English are being served (14, p. 33).
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CHAPTER III

BILINGUAL CAREER CLUSTERS

Introduction

This chapter contains bilingual career education units divided into twelve career clusters. The clusters are classified according to construction occupations; industrial and related occupations; office occupations; transportation occupations; art, design, and communication occupations; service occupations; health occupations; sales occupations; education and related occupations; scientific and technical occupations; social service occupations; and mechanic and repairing occupations.

Each career education cluster contains interest questions, a vocabulary list, and five job descriptions. The interest questions encourage the students to begin asking themselves if they might like to do certain activities generally associated with jobs in a particular cluster. The vocabulary list allows the students to concentrate on certain words in the cluster. The job descriptions include a short discussion of the job, the training required for the job, the earnings, and the future outlook in terms of availability of positions.

The career clusters may be presented separately or as a total module. They may be taped or personally presented by the instructor. The material may be spoken alternately in
each language or according to the preference of the instructor.

The bilingual career education clusters may be utilized in a classroom where there are students who are learning English. This bilingual career education material would be appropriate in either a general academic or vocational setting.

Construction Trades Occupations

**Interest Questions**

Would a career in construction interest you?

If you answer "yes" to most of the following questions, a career in the construction trades might interest you:

1. Do you like to be outdoors?
2. Do you have good balance?
3. Are you accurate in cutting and measuring?
4. Do you enjoy working with your hands?
5. Do you enjoy being part of a team?
6. Can you follow orders carefully?

**Preguntas de interés**

¿Le interesará una carrera en la construcción?

Si responde "sí" a la mayoría de las preguntas siguientes, una carrera en construcción tal vez le interesaría:

1. ¿Le gusta estar al aire libre?
2. ¿Tiene buen equilibrio?
3. ¿Es usted preciso para medir y cortar?
4. ¿Le gusta trabajar con las manos?
5. ¿Le gusta participar en un equipo?
6. ¿Puede seguir instrucciones con cuidado?
7. Are you dependable?

8. Can you visualize how something will look when it is put together?

9. Are you afraid of heights?

10. Do you have mechanical ability?

Vocabulary

manual dexterity
seasonal
the employee
the skills
mechanical drawing
tools
honesty
the increase
public utilities
dangerous
asset
training
beginner
union
plumber

7. ¿Se puede uno fiar de usted?

8. ¿Puede usted imaginar como parecerá un objeto cuando está unido?

9. ¿Tiene Ud. miedo a la altitud?

10. ¿Tiene Ud. habilidad mecánica?

El vocabulario

la destreza manual
temporal
el empleado
las habilidades
el dibujo mecánico
la herramienta
la honradez
el aumento
las empresas de servicios públicos
peligroso
la ventaja
el entrenamiento
el principiante
el sindicato
el plomero
craftspersons
average
glazier
useful
clean
wood
safety

Introduction
These workers build, repair, and renovate homes, highways, and airports. Their work is divided into three categories: structural, finishing, and mechanical.

Training.--Apprenticeship or informal training are ways to enter the construction occupations. Manual dexterity, mechanical aptitude and good vision are important.

Working Conditions.--Work is seasonal; and although hourly rates are very high, annual

los artesanos
el promedio
el vidriero
útil
limpio, a
la madera
la seguridad

Introducción
Estos trabajadores edifican, reparan, y renuevan casas, carreteras y aeropuertos. Su trabajo está dividido entre tres categorías: el estructural, el retoque y el mecánico.

El entrenamiento.--Para entrar a la carrera de construcción, uno debe tener el aprendizaje o entrenamiento informal. La destreza manual, aptitud mecánica y buena vista son características importantes.

Los ingresos y condiciones del trabajo.--El trabajo es temporal; y
Earnings are not on par.

Exposure to weather is common. Sometimes one must bend, stoop, or stand for long hours. There is some danger involved. Work is available in all parts of the country. With business ability there is opportunity to open private construction businesses.

Various work sites include filtration plants, refrigeration plants, oil refineries, missile launching sites.
Electricians

Electricians install wiring. The electrician must know how to balance the load by dividing incoming electricity into several circuits. The electrician needs to understand the correct rating to keep the wire from overheating. One must apply one's own hand tools. A large majority of construction electricians work for electrical contractors. Some work for government agencies.

Requirements.--A person must have a high school education. General mechanical ability and proficiency in elementary applied mathematics are required. Decimals, proportions and

Los electricistas

Los electricistas instalan los alambres. El electricista debe saber cómo equilibrar la carga para dividir la electricidad entrante entre varios circuitos. Necesita entender la estimación correcta para impedir que los alambres se recalienten. Debe proveer sus propias herramientas. La mayoría de los electricistas de construcción trabajan para compañías contratistas eléctricas. Algunos trabajan para agencias de gobierno o de negocios.

Los requisitos.—Una persona debe tener la educación de la escuela secundaria. Tener habilidad mecánica y matemática aplicada también son requisitos importantes. Debe tener
percentages are important. One must be alert and accurate.

The ability to work with the hands, to be able to visualize a complete job before one begins working on it is very important. One must be agile, physically strong and a quick learner. A sense of responsibility and honesty are important qualities.

The Future.--Employment opportunities will continue to grow. Urban renewal programs and increased use of electronic devices will account for the increase.

Construction Machinery

Operators

Construction machinery operators work with large machinery. Cranemen, bulldozer operators, and buena coordinación manual y visual. Debe ser alerta y preciso.

La habilidad de trabajar con las manos, poder visualizar un trabajo completo antes de comenzar es importante. Necesita ser ágil al igual que físicamente fuerte y aprender pronto. El sentido de responsabilidad y honradez son cualidades importantes.

El futuro.--Las oportunidades de empleo continuarán a aumentar. La urbanización y el incremento de aparatos eléctricos justifican este aumento.

Los operadores de máquinas

de construcción

Los operadores trabajan con maquinaria grande. Los que manejan las grúas y la empujadora niveladora son
hoistmen are all construction machinery operators. They work on highways, dams, tunnels, housing developments and airports—any excavation that requires digging, grating, and landscaping.

Working Conditions.—
Construction machinery operators work an eight hour day five days a week. Much of the work is seasonal. The job is considered hazardous. Shifting earth, falling objects, and heavy machinery are always dangerous.

The greater part of employment opportunities are in urban areas. Because some contractors send their employees all over the world, a bilingual employee would be of great advantage to any company.

maquinistas de construcción. Trabajan en las carreteras, las presas, los túneles, la urbanización, los aeropuertos—cualquier excavación, nivelando y embelleciendo el terreno.

Las condiciones de trabajar.—Los operadores de máquinas de construcción trabajan cuarenta horas por semana. La mayor parte de este tipo de trabajo es temporal. El empleo se considera peligroso. La tierra sufre cambios, los objetos que caen, y las máquinas pesadas son peligros diarios.

La mayor parte de los empleos está en los centros urbanos. Como algunos contratistas mandan a sus empleados por todo el mundo, un empleado que habla dos lenguas sería una ventaja para
Training.---On the job training is possible. The beginner starts out as a helper, learning to grease and oil equipment under supervision. One begins operating simple machines such as tractors and pumps. A three year apprenticeship program is necessary to qualify for a journeyman.

Salary and the Future.---Wages vary according to the complexity of the machines. Construction machinery operators who belong to the union have insurance programs and benefit plans. Increased federal spending for urban renewal programs and highway construction will provide thousands of jobs.

cualquier compañía.

El entrenamiento.---El entrenamiento en el trabajo es posible. El principiante comienza como ayudante aprendiendo a engrasar el equipo bajo la supervisión del jefe. Empieza manejando máquinas sencillas como tractores y bombas. Un programa de tres años como aprendiz es necesario para adquirir la competencia de oficial.

El sueldo y el futuro.---El salario varía según la complejidad de las máquinas. Los operadores de máquinas de construcción que pertenecen al sindicato local tienen programas de seguro y jubilación. El aumento de fondos federales para la urbanización y la construcción de las carreteras proveerán miles de empleos.
The Plumber

The plumber works with water and disposal systems and plumbing fixtures. The plumber lays pipe to connect plumbing systems in buildings to the city water supply, gas supply and drainage system. One installs indoor fixtures such as bathrooms, sinks, washing machines, and changes and repairs plumbing equipment.

To lay new plumbing he must be able to take measurements and read blueprints. He must know how to bend, weld, braze and thread pipes and fittings.

Earnings and the Future.-- Plumbers are among the highest paid skilled craftsmen. Since they work inside, seasonal layoffs do not affect them. Average wages in Dallas were $9.98

El plomero

El plomero trabaja con agua, sistemas de evacuación de residuos de agua y artefactos sanitarios. El plomero pone la tubería en los edificios, para el abastecimiento de gas y el desague para la ciudad. También instala los baños, las lavadoras, las pilas y los sumideros.

Para instalar la plomería nueva se deben tomar medidas y leer el plan detallado. Debe saber doblar, soldar y aterrajar la tubería.

El sueldo y el futuro.-- Los plomeros son de los artesanos mejor pagados. Como trabajan dentro, el trabajo temporal no les afecta. El promedio de sueldo en Dallas
per hour in 1979. Plumbers have the lowest accident rates of the entire construction industry. There will be a moderate increase in jobs due to technological developments.

Glaziers
Glaziers cut, install and replace plate glass in buildings. They also install glass in bathrooms and display cases. They need special skills in handling and cutting glass, good spatial perception, and good manual dexterity. Glaziers cut glass to fit properly. Some specialize in beveling and silvering glass for mirrors.

Where They Work.--Most are employed by independent glazing contractors. Some are employed in factories.

Los plomeros tienen el índice más bajo de accidentes en la industria de construcción. Habrá un aumento moderado en empleos debido al desarrollo tecnológico.

Los vidrieros
Los vidrieros cortan, instalan, y reponen cristal en los edificios. También instalan vidrio en los baños y en las vitrinas. Necesitan las habilidades especiales para cortar el vidrio, buena percepción espacial, y buena destreza manual. Algunos especializan en el biselado y azogando el vidrio para espejos.

Donde trabajan.--La mayoría son empleados por contratistas independientes. Algunos son empleados en
installing glass in doors, partitions and mirror frames. Most work is found in larger cities.

Training.--Helpful high school classes include math, mechanical drawing, metal and wood shop. This training will help in reading blueprints to determine material requirements as well as getting used to working with wood and metal.

Wages and the Future.--The wages vary from one part of the country to another. In July of 1979 in Dallas, Texas the average wage was $8.84 per hour.

There are openings for about one thousand glaziers each year. Increased use
of glass in building construction should create many jobs.

**Carpenter**

The carpenter's work can be divided into two categories. Rough work includes basic framework, concrete forms, scaffolding, and docks. The second category, finish work, includes all types of interiors. Finish work requires much skill. An expert carpenter can do both. The carpenter uses power tools and hand tools. Wood is the main building material, but tile, insulation board, and composition shingles are also used.

**Requirements**—Entering through an apprenticeship program, the applicant should be between seventeen and

**El carpintero**

El trabajo de carpintero se puede dividir en dos categorías. El trabajo duro, incluye la armazón básica, las formas concretas, el andamio. La segunda categoría es la del interior del edificio. El trabajo acabado necesita mucha técnica. Un carpintero usa herramientas con motor. La madera es el material de construcción que se usa más. Se usa también la teja, la madera de insulación, y la tabla de composición.

**Los requisitos**—Al entrar a un programa regular de aprendiz, el aplicante debe tener entre diez y siete
twenty-seven years of age, must be in good mental health, be able to handle heavy tools and materials, have mechanical aptitude, manual dexterity, and high degree of eye-hand coordination.

Though power equipment may be provided by the employer, the carpenter must have his own hand tools. He must have enough high school education to understand classroom instruction. Recommended high school courses include math, mechanical drawing, and science.

Wages and The Future.--

The hourly rate in the Dallas area was $10.20 as of July, 1979. The need for carpenters is on the increase. Retirements and deaths alone will y veintisiete años, debe gozar de buena salud y debe tener aptitud mecánica, la destreza manual, la coordinación de ojo a mano.

Aunque las herramientas eléctricas pueden ser proporcionadas por el patrón, el carpintero debe comprar sus propias herramientas. Debe tener la educación de la escuela secundaria para entender la instrucción de la clase. Las clases recomendadas en la escuela son la matemática, el dibujo mecánico y la ciencia.

El sueldo y el futuro.--

El sueldo por hora en Dallas era de $10.20 en julio de 1979. La demanda para carpinteros ha ido aumentando.
open up twenty-one thousand jobs annually.

Industrial and Related Occupations

**Interest Questions**

1. Do you enjoy working with your hands?
2. Do you enjoy doing detailed work?
3. Are you accurate in your work?
4. Do you have good eye-hand coordination?
5. Do you like to be around heavy machinery?
6. Would you enjoy operating heavy machinery?
7. Can you concentrate with a lot of noise?
8. Are you physically agile?
9. Are you physically strong?
10. Would you like to work at hourly wages?

**Preguntas de interés**

1. ¿Le gusta hacer trabajos manuales?
2. ¿Le gusta hacer trabajo detallado?
3. ¿Hace su trabajo con exactitud?
4. ¿Tiene buena coordinación entre ojo a mano?
5. ¿Le gusta trabajar con maquinaria grande?
6. ¿Le gustaría manejar la maquinaria grande?
7. ¿Puede Ud. concentrar cuando hay mucho ruido?
8. ¿Es Ud. ágil físicamente?
9. ¿Es Ud. fuerte físicamente?
10. ¿Le gustaría trabajar con un sueldo por hora?
Introduction

Mass production is not possible without interchangeable parts. These industrial workers make items used to assemble identical parts. There are many jobs that support production without being directly involved in it. A high school diploma is preferred for most of these jobs. Though skilled workers such as engineers will require a four year college diploma.

Vocabulary

1. the upholsterer
2. the furniture
3. the fabric
4. the factory
5. the owner
6. the cost
7. the drawing
8. to pour
9. the blueprints

Introducción

La producción en serie no es posible sin intercambio. Los trabajadores industriales hacen cosas que son usadas para hacer partes idénticas. Hay muchos trabajos que apoyan la producción sin comprometerse. Se acepta la graduación de la escuela secundaria para la mayoría de estos empleos, aunque el trabajo de ingeniero requiere la graduación de la universidad.

El vocabulario

1. el tapicero
2. los muebles
3. la tela
4. la fábrica
5. el dueño
6. el costo
7. el dibujo
8. vaciar
9. la cianotipia, plan detallado
What They Do.—There are three parts to the upholsterer’s task: making a base, installing springs and inserting fillers and padding, and finally covering the furniture with fabric. Some upholsterers only measure and cut fabric. Some only sew material. Some persons only work on the frame to be upholstered. Some persons only work on the cushions. In large factories

Lo que hacen.—El tapicero se encarga de tres trabajos: hace la base, instala resortes y acolchona los muebles, y forra los muebles con tela. Algunos tapiceros solamente miden, cortan, o coseñ la tela. Otros trabajan en la forma para tapizar, y otros hacen los cojines. En las fábricas grandes el trabajo se puede dividir entre varios trabajadores, pero en las
the work is divided. In small custom shops an upholsterer might do all tasks involved with covering the furniture.

**Working conditions.**—In factories making cars, aircraft, bus, theater and school seating, the upholsterers might work on a production line. In custom shops the upholsterer might go to the customer's home to give estimates. Those upholsterers who own their own businesses usually work longer hours than a forty hour week. The job is physically demanding. There is lifting, reaching and pulling.

fábricas pequeñas, el tapicero hace todas las tareas.

**Las condiciones de trabajo.**—En las fábricas donde fabrican los automóviles, aeroplanos, autobuses, las sillas para el teatro y las escuelas, los tapiceros trabajan en línea de producción. En una fábrica pequeña, el tapicero puede ir a las casas de sus clientes para darles presupuestos. Los tapiceros que son dueños por lo regular trabajan más de cuarenta horas por semana. El trabajo es difícil físicamente porque tienen que estirar, levantar y agacharse mucho.
Requirements.--Good vision, and color perception, manual dexterity, ability to follow instructions and spatial perception are all important to an upholsterer. On-the-job training, apprenticeship programs, public and vocational schools are all methods to learn upholstery. Classes in drafting, wood and sewing would be helpful.

Advancement and earnings.--Supervisory positions are available for upholsterers with leadership ability. The earnings depend on whether the upholsterer is self-employed or a factory worker. Some are paid by the hour and

Los requisitos.--Es importante que el tapicero tenga buena vista, percepción de color y espacio, buena destreza manual, y que pueda seguir instrucciones. Uno puede aprender la tapicería entrenándose en el trabajo, en programas de aprendiz, y en las escuelas públicas o vocacionales. También las clases en el dibujo mecánico, clases donde trabajan con madera, y las clases de costura serían muy útiles para el entrenamiento de tapicería.

El avance y el sueldo.--Las posiciones de supervisores están disponibles para los tapiceros con la habilidad para dirigir. El salario depende en si el tapicero es el dueño de su taller o es trabajador de fábrica. Algunos tapiceros reciben sueldo
some are paid by the piece.

Future.—The outlook is fair. The cost of reupholstering will be almost as high as replacing the furniture. The competition is stiff.

Foundry Workers

A foundry is a casting plant. A casting plant produces metal castings from hot melted metal which is poured into molds to become solid. Castings are found in plumbing fixtures, heating equipment, electrical appliances, furniture, automobiles, space capsules and engines. The casting industry is one of the largest in America. Most plants specialize in one particular type of metal.

El futuro.—El tapicerio tiene un buen futuro. El costo de tapizar es casi el mismo costo de reponer los muebles. Pero al mismo tiempo hay mucha competencia en esta clase de trabajo.

Los trabajadores de la fundición

Una fundición es una fábrica donde se funden los metales. Estos metales que están en forma de líquidos se vacían en moldes para hacerse sólidos. Las piezas fundidas, o moldeadas se usan en la plomería, en los calentadores, en los aparatos eléctricos, los muebles, los automóviles y los motores. La fundición es una de las industrias.
because different equipment is needed to work with each type of casting.

Before a project enters the foundry, an engineer designs the casting to be molded and a drafts person draws up blueprints. A patternmaker studies the blueprint and designs a pattern from wood, metal or plastic. A molder then creates a mold. Men are needed to operate the furnaces which melt the metal and pour them into molds.

**Requirements.**—Good health, mechanical ability, mental alertness, good eyesight and good judgement are considered important for más grandes en los Estados Unidos. La mayoría de las fábricas se especializan solamente en un tipo de metal porque se necesitan diferentes materiales para cada molde.

Antes de llevar un proyecto a la fábrica de fundición, un ingeniero dibuja el molde, y otra persona dibuja el plan detallado. El carpintero modelista estudia el plan y dibuja un modelo de madera, de metal o de plástico. El moldeador luego hace un molde. Los trabajadores se necesitan para operar los hornos que derriten los metales y hacerlos en los moldes.

**Los requisitos.**—Buena salud, habilidad mecánica, mentalidad alerta, buena visión y el buen juicio son consideraciones importantes.
foundry workers. High school training is an asset with math, physics, chemistry, mechanical drawing and industrial arts being very helpful, but four years are preferred for professional positions.

Training.--Some foundry workers start as unskilled workers and are promoted as they earn experience. Formal apprenticeships are necessary for skilled jobs. The apprenticeships last four years.

para trabajadores de la fundición. Una educación en la escuela secundaria con clases en matemática, física, química, el dibujo mecánico, y las artes industriales son útiles. Como hay una demanda para los técnicos en la fundición, dos años de colegio son útiles; pero cuatro años de la universidad son preferidos para las posiciones profesionales.

El entrenamiento.-- Algunos trabajadores de la fundición empiezan como trabajadores inhábiles pero al adquirir experiencia, están en posición para avanzar. Los aprendizajes formales son necesarios para los empleos de habilidad. Los aprendizajes duran cuatro años.
Earnings and the future.—

Wages are above the average for factory work. More workers are needed, especially technicians and professionals for research in quality control and casting methods. A decline in the unskilled laborers is anticipated.

Welders

Electric-arc welders, resistance welders and oxygen are the most common types of welders. The electric-arc welder chooses an electrode, adjusts the electric current, and strikes an arc by touching the electrode to the metal to be welded. This action will create an electric arc.
circuit that will continue to arc across the space between the metal pieces even when the electrode is withdrawn. This great heat causes the metal to melt. The melted metal is placed in the joint to be solidified.

The resistance welder works exclusively with machines. The welder places the pieces to be welded into a machine, and they emerge as one piece.

The oxygen cutter uses gas torches for trimming, shaping and cutting metal pieces. The trimming is done along marked lines according to the pattern.

Where they work.--Manufacturers of boiler shop and sheetmetal products employ many welders. Also aircraft and automobile

El soldador de resistencia trabaja exclusivamente con las máquinas. El soldador pone los pedazos de metal en una máquina y salen en un pedazo.

Un cortador de oxígeno usa los sopletes de acetileno para cortar el metal. El desbastado se hace siguiendo las líneas del diseño.

Donde trabajan.--Los fabricantes de las calderas y la lámina de metal usan muchos soldadores. Los soldadores también se
industries, construction work and metal repair shops. More than fifty per cent of welding jobs are in Michigan, Illinois, Pennsylvania, Ohio, California, New York and Texas.

Requirements.—Manual dexterity, good vision, and eye-hand coordination are very important to a welder. Courses in welding at a vocational trade school and then on-the-job training are usual methods of entry. After being a helper to an experienced welder, a beginner may advance to the job of second-class welder. To be a first-class welder, a qualifying examination must be passed, and certification may be required.

encuentran en las industrias de aeronave, de automóvil, de construcción y de las reparaciones de metal. Hay más de cincuenta por ciento de empleo en la soldadura en los estados de Michigan, Illinois, Pennsylvania, Ohio, California, New York y Texas.

Los requisitos.—La destreza manual, la buena vista, y coordinación entre ojo a mano son muy importantes a un soldador. Para empezar, uno debe tomar las clases de la soldadura en una escuela vocacional y después de trabajar con un soldador con experiencia, el soldador principiante puede avanzar al empleo de soldador de segunda clase. Para hacerse soldador de primera clase, debe pasar un examen.
Advancement.--With a high school education, advancement to welding foreman or job-shop owner are possible.

Earnings and the future.--Wages depend on where one works, one's level of skill, the industry for which one works and whether one is a union member. The construction industry will continue to employ more welders as welded steel production is increasing.

Printers

What they do.--Producing printed matter requires several types of jobs and skills. First, a manuscript must be set in type; then, it is proofread and arranged in a page with illustrations according to a specific plan.

El avanzo.--Si uno tiene educación de la escuela secundaria, es posible avanzar a capataz o ser dueño de un taller.

El sueldo y el futuro.--El salario depende de donde trabaja, el nivel de habilidad, la industria donde trabaja, y si pertenece al sindicato. La industria de la construcción empleará más soldadores porque la producción de acero está aumentando.

El impresor

Lo que hacen.--La producción de impresos requiere varios tipos de empleos y de habilidades. Primero, un manuscrito debe ponerse en tipo, luego es corregido y arreglado en una página con ilustraciones según un plan.
This page must be prepared for printing by being reproduced on plates for printing presses. After the material is printed, it must be folded, trimmed, and if books or magazines, stitched and/or bound.

The press persons adjust the printing press. They mix the ink, load the paper and make the necessary adjustment. They must watch the press carefully to be sure it is operating properly and check the printed sheets to be sure the impression and color are correct.

Requirements.--The job is learned through four year apprenticeship programs. Physics and chemistry are important to presspersons who need to learn to mix colors. Physical strength is necessary for many pressperson

específico. Esta página se prepara para grabar reproduciéndola en placas para la prensa. Después de la impresión, se debe doblar, recortar, y si son revistas o libros, cosido y encuadernado.

Los impresores ajustan la prensa. Mezclan la tinta, cargan el papel y hacen los ajustes necesarios. Deben revisar la prensa con cuidado para estar seguros que funciona. También miran los impresores con cuidado para estar seguro que operan bien.

Los requisitos.--El empleo se aprende por los programas de aprendiz que duran cuatro años. La física y la química son importantes a los impresores que necesitan aprender a mezclar los colores. La fuerza
jobs.

Wages and the future.--
Pressmen earn good wages. Benefits are more than adequate. Noise and heat are occasional disadvantages. A pressperson can advance to foreman, plant superintendent, or perhaps own his own plant. Employment opportunities should be good. There is anticipated a rise in the volumes of printed material.

Waste Water Plant Operators

They keep water clean by removing harmful domestic and industrial waste. These operators control equipment to remove these materials or make them harmless. They work in city plants, private industry, and federal installations.

física se necesita para muchos empleos de la prensa.

El salario y el futuro.--
Los impresores ganan buen salario. Los beneficios son más que suficientes. El ruido y el calor son las desventajas ocasionales. Un impresor puede avanzar a capataz, a superintendente de la fábrica o tal vez poseer su propio taller. Las oportunidades del empleo deben ser buenas. Esperan un aumento en los volúmenes de los materiales impresos.

Los maquinistas en las fábricas de aguas residuales. Estas personas limpian el agua eliminando los residuos dañinos domésticos e industriales. Estos maquinistas manejan la maquinaria para eliminar estos materiales o los hacen inofensivos. Trabajan en fábricas, la
Training.--On-the-job training such as meter readings, taking samples of waste water, doing simple maintenance and repair work on pumps, motor and valves are some of the beginning tasks. Employers prefer high school education with mechanical aptitude, elementary math being necessary. Workmen must be agile as they move and climb.

Some two year programs in waste-water technology are offered that provide knowledge of the water pollution field. Workers may be promoted to positions of foreman or superintendent.

El entrenamiento.--Los trabajadores principian-tes empiezan entrenándose leyendo los contadores, tomando las muestras de los residuos, haciendo el mantenimiento sencillo y las reparaciones en las bombas, los motores y en las válvu- las. Los patrones prefieren trabajadores con educación de escuela secundaria, con la aptitud mecánica, y es necesario que hayan tomado clases de matemáticas.

Se ofrecen algunos programas de tecnología en residuos que dan el conocimien-to de la contaminación del agua. Los trabajadores pueden avanzar a la posición de capataz o de superintenden-dente.
Educational requirements are becoming more strict as more complex treatment plants are built to meet new water pollution control standards.

The future.—Expected to rise rapidly through the 1980's, there are many new plants being built to process the increasing amount of domestic and industrial waste water. Water pollution continues to be a problem. Approximately 100,000 persons worked in the waste water industry in 1976 at salaries varying from $9,000 to $13,000 per year.

A causa de nuevas medidas para controlar la contaminación del agua, los requisitos educacionales para los que edifican fábricas llegan a ser más rígidos.

El futuro.—Se espera que los números de maquinistas en las fábricas que controlan la contaminación vayan aumentar en los años que vienen. Muchas fábricas nuevas se están edificando para someter todos los residuos domésticos e industriales. Aproximadamente 100,000 personas trabajaban en 1976 en las industrias de residuos con salarios de $9,000 a $13,000 por año.
Office Occupations

Interest Questions for Office Occupations

1. Do you have a pleasant personality?
2. Do you enjoy being around people?
3. Do you like to follow instructions?
4. Are you always accurate in your work?
5. Are you not satisfied until a job is well done?
6. Do you enjoy sitting for long periods of time?
7. Can you make decisions if the need arises?
8. Are you orderly in your work habits?
9. Would you like to work in an office?
10. Do you enjoy being part of a team?

Las preguntas de interes para las ocupaciones de la oficina

1. ¿Tiene Ud. una personalidad amable?
2. ¿Le gusta estar entre la gente?
3. ¿Le gusta seguir instrucciones?
4. ¿Es Ud. generalmente preciso en su trabajo?
5. ¿No está Ud. satisfecho hasta que su trabajo esté bien hecho?
6. ¿Prefiere Ud. trabajar sentado la mayoría del tiempo?
7. ¿Puede Ud. hacer decisiones si hay necesidad?
8. ¿Es Ud. metódico en su trabajo?
9. ¿Le gustaría trabajar en una oficina?
10. ¿Le gusta pertenecer a grupos?
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<th>El vocabulario</th>
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<td>2. la habilidad</td>
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<td>3. clean</td>
<td>3. limpio,-a</td>
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<td>20. to increase</td>
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**Introduction**

Office workers help to keep a business functioning. Clerical workers maintain files, type, and operate...
office machines. Legal advice, preparation of financial reports, designing computer systems, and arrangement of bank loans is done by professional employees.

There is a wide range of entry occupations. Some jobs require a college degree; some jobs require a high school education.

Detailed repetitive tasks are done by many clerical employees. Many professional office workers use ideas and solve problems to improve services for others. Good judgement, technical skills and ability to communicate ideas are very important.

se encargan de los archivos, escriben a máquina y manejan las máquinas de la oficina. Los empleados profesionales se encargan de los consejos legales, la preparación de informes financieros, el diseño de los sistemas de computadoras y el arreglo de los préstamos del banco.

Hay muchas ocupaciones para ingresar a este tipo de empleo. Algunos empleos requieren un grado universitario de licenciatura. Otros empleos requieren el haberse graduado de la escuela secundaria.

Las tareas cotidianas y detalladas las hacen los empleados de oficina. Muchas oficinistas profesionales usan buenas ideas y resuelven los problemas para mejorar los servicios de las compañías donde
Secretaries

What they do.--Most secretaries are familiar with the basic office skills of typing and shorthand, correct English and spelling and a familiarity with office machines. The secretary saves the boss time and energy in handling administrative details. There are specialties for secretaries in medicine, science, law, and education. Both men and women are in demand as secretaries.

Las secretarias

Lo que hacen.--La mayoría de las secretarias tienen conocimientos básicos de los trabajos de oficina que son: escribir a máquina, taquigrafía, inglés correcto, ortografía y el conocimiento de las máquinas de la oficina. La secretaria le ahorra a su jefe, tiempo y energía en el manejo de detalles administrativos. Hay especialidades para las secretarias en medicina, ciencia, leyes y la educación. Los hombres y mujeres están en gran demanda como secretarias y secretarios.
Where they work.--Most secretaries work in well lit, clean offices. They work a forty hour week. If they work overtime, they receive compensations.

Training and other qualifications.--A good secretary who can type fifty-five words per minute, has a working knowledge of English and Spanish, can read rapidly and organize work is an asset to a business. A secretary must be willing to assume responsibility. A pleasant voice, neat appearance, tact, initiative and the ability to understand instructions are very important traits of a good secretary. A high school diploma is a
minimum requirement. Business courses in high school and after graduation in junior college or business schools are available. Some universities award bachelor's and master's degrees to secretarial science majors.

Earnings.—In January, 1980, openings for secretaries ranged from $650 to $900 depending on experience. Large companies generally have adequate benefit programs. Secretaries who belong to the Office and Professional Union receive between $1,000 to $1,500 per year more than their non-unionized counterparts.

El salario.—Durante enero de 1980 los salarios para las secretarias varían de $650 a $900 por mes dependiendo de la experiencia. Las compañías grandes generalmente tienen mejores beneficios. Las secretarias que son miembros de sindicato ganan $1,000 a $1,500 más anualmente que las que no son miembros.
The future.—As businesses expand, increased paperwork will lead to increased secretarial employment. Over two hundred thousand secretaries will be hired annually in the United States due to new openings.

Computer Programmers

What they do.—The programmer prepares step-by-step instructions for the computer to follow. An experienced programmer must work out exact steps for a problem's solution before it can be processed.

Many programmers specialize in business or science. Simple programs may take a few days to write, but complex programs could take a year.

El futuro.—Cuando los negocios se extienden, hay más trabajo de llenar papeles, y así aumentan más los empleos para secretarias. Más de doscientas mil secretarias se emplean anualmente en los Estados Unidos debido a que se abren nuevas vacantes.

Los programadores de computadoras

Lo que hacen.—El programador prepara las instrucciones detalladas para la computadora. Un programador con experiencia debe saber los pasos exactos para la solución de un problema antes de que se pueda tratarlo.

Muchos programadores se especializan en negocios o en ciencias. Los programas sencillos pueden tomar unos días para escribirse, pero los programas
Where they work.—Many programmers work in large businesses and government agencies. Many work for computer manufacturers or independent businesses that furnish services.

Training.—Programmers can find jobs with varied levels of training. Businesses that use computers for engineering prefer college graduates. Office workers with experience in machine tabulation or payroll may be promoted to date processing. Programming skills can be learned at colleges, universities and technical schools. Programmers need to be logical thinkers. Important traits are patience, persistence and

Complejos pueden durar un año.

Lugar donde trabajan.—Muchos programadores trabajan en negocios grandes y para las agencias del gobierno. Muchos trabajan para los fabricantes de computadoras.

El entrenamiento.—Los programadores de computadoras pueden encontrar los empleos con varios niveles de entrenamiento. Los negocios que usan las computadoras para la ingeniería prefieren a los graduados de colegio. Los trabajadores de oficina con experiencia en máquinas tabuladoras pueden avanzar a la preparación de información procesada por computadoras. Las habilidades de la programación se aprenden en los colegios,
accuracy.

Earnings.—Beginning programmers are starting at $12,000 per year in Dallas, in 1980. Computer programmers generally work a forty hour week, but their shifts may be staggered. Beginning programmers generally have to be supervised for their first year on the job. A skilled programmer can be promoted to lead programmer or systems analyst with supervisory responsibilities.

universidades, y escuelas técnicas. Los programadores necesitan pensar lógicamente y sus características más importantes son la paciencia, la persistencia, y la exactitud.

El salario.—En Dallas, Texas los programadores empiezan con un sueldo de $12,000 por año en 1980. Los programadores trabajan generalmente cuarenta horas por semana, pero algunas veces trabajan por la noche. Los programadores de computadoras generalmente tienen que tener supervisores durante su primer año en el empleo. Un programador con la habilidad puede avanzar a programador de jefe o analista de sistemas con responsabilidades de supervisor.
The future.--The number of jobs will increase. As business continues to use computers, computer jobs will increase. Banks, insurance companies and factories will continue to experience substantial growth.

Personnel Workers

What they do.--Personnel workers link the management of a company to its employees. Personnel workers find people to fill available jobs, interview job applicants, train new employees, look after safety training and accident prevention, and are in charge of company benefit programs. Personnel workers may evaluate an employee's work,
recommending raises, promotions, and transfers. Personnel workers train administrators to handle complaints. They also implement government guidelines for equal opportunity and affirmative action programs. Some job titles in a personnel department are director of employee relations, interviewer, training director, wage and salary administrator, specialist in labor relations, and safety director.
Where they work.--They generally work in comfortable office surroundings in or near big cities. They work in banks, department stores, private industries, and public utilities. Office hours are fairly regular. Personnel workers might travel if they are recruiters or they might represent the company at meetings and conferences.

Training.--Some employers will hire good personnel workers with a high school education. Most employers prefer a college graduate. Courses in business administration, or employee relations would be helpful. A summer job and high school activities can help a person in different situations.

Lugar donde trabajan.--Generalmente trabajan en edificios con oficinas cómodas, cerca de o en ciudades grandes. Las horas de oficina son regulares. Trabajan en bancos, tiendas grandes, industria y empresas de servicios públicos. Los gerentes de personal pueden viajar para reclutar empleados, o pueden representar a la compañía en reuniones y conferencias.

El entrenamiento.--Algunas compañías emplearán gerentes de personal con educación de la escuela secundaria, pero la mayoría de las compañías prefieren personal graduado de la universidad. Las clases en administración de personal y relaciones con los empleados les ayudarán. Un empleo de verano y las actividades
Earnings.--Starting salaries for beginning personnel workers average approximately $11,000. The benefits are the same for other employees in the organizations.

The future.--Supervisory positions require administrative management experience and experience in employee relations. Employment in personnel work will continue to grow as companies see how important employee relations can be to their success.

del la escuela pueden ayudar a una persona aprender a trabajar con la gente en diferentes situaciones.

El salario.--Los gerentes de personal comienzan con un salario aproximadamente de $11,000 por año. Los beneficios son los mismos que para otros empleados en la organización.

El futuro.--Las posiciones de supervisor requieren experiencia administrativa y experiencia en las relaciones entre los empleados que dirigen las organizaciones. El empleo en el trabajo de gerente de personal continuará en aumentar así como las compañías vean que la importancia de las relaciones de los empleados puedan ayudarles a tener éxito.
Insurance Adjustor

What they do.--To understand what an adjustor does, it is necessary to understand insurance. To protect oneself against fire, for example, a homeowner pays the insurance company a sum of money called a premium. The premium becomes a part of a common fund where the premiums from all policies are deposited. It is from this fund that the company will reimburse policy holders who suffer losses. Because a few people have to file claims, the greater part of the policy holders share the cost of the losses.

When the insured persons suffer a loss, the insurance company will

El ajustador de seguros

Lo que hacen.--Para entender lo que hacen los ajustadores es necesario entender los seguros. Protegiéndose contra el fuego por ejemplo, el dueño de una casa paga a la compañía de seguros una cantidad de dinero que se llama prima. La prima es parte de un fondo común donde las primas de todas las pólizas de seguros están depositadas. Es de este fondo que la compañía reembolsará a los dueños de las pólizas que sufren pérdidas. Ya que pocas personas tienen que presentar demandas, la mayor parte de los dueños de las pólizas comparten el costo de las pérdidas.

Cuando las personas aseguradas sufren una
company is notified. The claim is given to an adjuster. The adjuster first takes steps to prevent further loss such as trying to protect property not damaged. He determines how much money is owed to the insured person. The adjuster fills out reports to the firm.

Where they work.-- Some adjusters work inside an office and handle small claims by phone. Some outside adjusters travel, work odd hours and are always on call. An adjuster is often found at the scene of an accident or at a body shop giving estimates for repair.

página, la compañía de seguros es notificada. La reclamación se refiere a un ajustador. El ajustador toma medidas para impedir más pérdidas tales como tratar de proteger la propiedad que no sufrió daños y determina cuanto dinero se debe a la persona asegurada. El ajustador escribe los informes a la compañía.

Lugar donde trabajan.-- Algunos ajustadores trabajan dentro de una oficina y tratan las reclamaciones pequeñas por teléfono. Algunos ajustadores que trabajan fuera de la empresa viajan y trabajan horas irregulares, están siempre disponibles. Un ajustador se encuentra a menudo en la escena de un
Training.—Adjusters must understand how to get along with people. Clients, police, auto appraisers and medical specialists are some of those he sees often. Keen observation, sound judgement, and attention to detail are important aspects of his work. Educational requirements vary from high to a low degree depending on the firm. Some states require a licensing examination and approved courses in insurance adjusting.

Earnings.—Usually a new adjuster will start at $10,000 a year. He may have a travel allowance and is eligible for the usual benefits of the

accidente o en un taller de carrocería, calculando el costo de las reparaciones.

El entrenamiento.—Los ajustadores deben entender como llevarse bien con la gente. Los clientes, la policía, los evaluadores de automóviles y los médicos son personas que ven a menudo. La observación, mucho juicio y la atención al detalle, son aspectos importantes de su trabajo. Los requisitos educativos varían según la compañía. Algunos estados requieren una licencia, un examen, y cursos aprobados para obtener un certificado.

El sueldo.—Generalmente un nuevo ajustador comienza con $10,000 por año. Puede tener una pensión y tiene derecho a los
insurance company.

The future.—The demand for insurance adjusters will increase due to rapid population growth. Rising personal income and increased consumer use of goods and services will also increase the demand for insurance adjusters.

Lawyers

What they do.—Lawyers advise and represent their clients. The client could be a citizen, a corporation, or a government agency. Some lawyers spend most of their time in court. Others prepare legal documents such as wills, contracts and mortgages.

beneficios de una compañía de seguros.

El futuro.—La demanda para los ajustadores de seguros se asegura crecer debido al rápido aumento de la población. El aumento de los ingresos personales y más uso de los productos y de los servicios utilizados por los consumidores también aumentarán la demanda para los ajustadores de seguros.

Los abogados

Lo que hacen.—Los abogados aconsejan y representan a sus clientes. El cliente puede ser ciudadano, compañía, o agencia del gobierno. Algunos de los abogados pasan la mayor parte de su tiempo en la corte. Los otros abogados preparan los documentos
A lawyer does not have to agree with his client, but he has to represent him fairly in court. There are many specialties in law such as corporation, labor, patent, real estate, and taxes.

Where they work.--Most are in private practice or in partnerships. Many are employed by government agencies. Some serve on legal staffs of corporations. Others teach law, manage law offices, and administer activities of law organizations.

jurídicos, como los testamentos, los contratos y las hipotecas.

Un abogado no tiene que estar de acuerdo con sus clientes, pero tiene que representarlos con justicia en la corte. Hay muchas especialidades en la ley como las corporaciones, el trabajo, la patente o bienes raíces, y el impuesto.

Lugar donde trabajan.--La mayoría de los abogados están en la práctica de derecho privado o en asociaciones. Muchos abogados están empleados por las agencias del gobierno. Algunos están de planta en grandes corporaciones. Otros dan clases de leyes y administran las actividades de las organizaciones de leyes.
Training.—Students must take a college preparatory program in high school. Visiting courts, reading books about lawyers, developing good writing skills, and critical thinking are all very important. Most states require a bachelor's degree plus law school graduation before admission to the bar. The best jobs usually go to those who finish highest in the class.

The new lawyer must pass the bar exam of the state where he intends to practice. Most new lawyers begin as

El entrenamiento.—Los estudiantes deben estudiar un programa preparatorio en la escuela secundaria para poder entrar en la universidad. Visitando las cortes, leyendo libros sobre ley, hablando con los abogados, desarrollando buenas habilidades en escribir y un pensamiento critico son cualidades muy importantes. La mayoría de los estados requieren una licenciatura y un grado universitario en derecho antes de ser licenciado para ejercer la abogacía. Los mejores empleos van generalmente para los que reciben las calificaciones superiores en clase.

El nuevo abogado debe pasar los ejercicios de la abogacía del estado donde tenga la intención de practicar.
associates and serve as assistants doing research and writing briefs. Associates who perform well may be asked to be junior partners.

Salarios.--Beginning salaries are low. A new lawyer starting his own practice has a particularly difficult time. Starting salaries vary between $12,000 and $15,000.

The work is interesting, rarely dull. There is no set retirement age. Physical handicaps are not important. There is much pressure. The work is demanding. There is more than the average amount of schooling.

La mayoría de los abogados empiezan como asociados y sirven como ayudantes documentando investigaciones y escribiendo los expedientes. Los asociados que realizan bien pueden ser avanzados a socios menores.

Los salarios.--Los salarios son bajos para empezar. Un abogado nuevo que empieza su propia práctica tiene muchas dificultades. El salario para un principiante varía desde $12,000 a $15,000 por año.

The Future.—The Department of Labor estimates that there will be an increase in the demand for legal services due to the growing population. Expanding industry and increased home construction will also increase the demand for legal service.

Transportation Occupations

Interest Questions for Transportation

1. Do you like to travel?
2. Do you enjoy talking to many different kinds of people?
3. Do you have good vision?
4. Do you use good judgement in making decisions?
5. Do you speak more than one language?
6. Can you work under great stress?
7. Do you enjoy working outside?

El futuro.—El Departamento de Trabajo calcula que habrá aumento en la demanda para los servicios jurídicos a causa de la población creciente y el desarrollo de la construcción de casas.

Preguntas de interés para la transportación

1. ¿Le gusta viajar?
2. ¿Le gusta hablar con varias clases de gente?
3. ¿Tiene buena vista?
4. ¿Muestra Ud. buen juicio cuando tiene que hacer decisiones?
5. ¿Habla más de un idioma?
6. ¿Puede trabajar bajo mucha tensión?
7. ¿Le gusta trabajar afuera?
8. Would you like working at night?
9. Would you like a job that holds some danger?
10. Does adventure appeal to you?

Vocabulary
1. freight
2. to grow
3. outside
4. maintenance
5. average
6. slowdown
7. spending
8. first aid
9. the flight
10. an asset

Introduction
The transportation industry generally includes jobs in air, rail, highway, and water transportation. Some jobs require only a high school education. Other jobs require a college

8. ¿Le gustaría trabajar de noche?
9. ¿Le gustaría un empleo que tiene algún peligro?
10. ¿Le gusta la aventura?

El vocabulario
1. la carga
2. crecer
3. al exterior
4. el mantenimiento
5. el promedio
6. el retraso
7. el gasto
8. los primeros auxilios
9. el vuelo
10. una ventaja

Introducción
La industria de transporte incluye generalmente los empleos en la transportación del aire, del ferrocarril, de la carretera, y del agua. Algunos empleos requieren
degree. Most of the employees operate or maintain trucks, buses, airplanes, trains and ships. The remaining employees in transportation provide customer services such as airline attendants. Employment in most air and highway transportation jobs is expected to increase. Demand for freight and passenger service is also expected to rise.

The following readings contain job descriptions of airplane mechanics, flight attendants, local bus drivers, and long distance truck drivers.
Airplane Mechanic

What they do.--The airplane mechanic performs scheduled maintenance checks, normal repairs, and complete inspections required by the Federal Aviation Commission. Mechanics work on many types of airplanes, one type of airplane, or one section of an airplane.

Where they work.--They work for major airlines, the Federal Government, small repair shops, companies that operate their own private planes. Military bases and large cities are the most frequent places they are found.

Training.--One can train to be an airplane mechanic who works on structural parts of airplanes such as wings,

El mecánico de los aviones

Lo que hacen.--El mecánico de los aviones mantiene los aviones, hace reparaciones normales e inspecciones de acuerdo con la Comisión Federal de la Aviación. Los mecánicos trabajan con muchos tipos de aviones, o solamente con un tipo de avión, o nada más en una sección del avión.

Donde trabajan.--Los mecánicos trabajan para las líneas aéreas, el gobierno federal, los talleres pequeños de reparaciones y las compañías que operan sus aviones privados. Se encuentran en las bases militares y las ciudades grandes.

El entrenamiento.--Uno puede entrenar para ser mecánico que trabaja sólo en la estructura del avión
landing gear, and fuselage. One can train to be a power-plant mechanic who works on the engine only. Eighteen months work experience is required for either type license. An inspector must have held a license for three years. The training can be learned through trade schools certified by FAA or the Armed Services. Attendance at these schools can be used as a substitute for work experience when applying to a job. Mechanics who learned their craft in the armed services attend a short class in trade school to learn materials specific to civilian aircraft. Classes in math, physics, technical drafting are beneficial because a knowledge of aircraft principals is necessary in order to learn how...
to make repairs. They must be able to do detailed work and lift heavy parts. They also must be willing to work at heights. The airplane mechanic can advance to head mechanic, inspector, chief inspector, shop supervisor. Some supervisors might advance to executive positions and open their own repair shops.

Earnings.—In 1976, the average salary of airline mechanics was $23,061. Also they receive reduced fare benefits with most airlines. They receive the usual union benefits.
The future.—There will be increased competition for jobs due to airline slowdowns. Opportunities for airline mechanics to work for the government will fluctuate with defense spending.

Flight Attendants

What they do.—They help to make the trip safe, comfortable and enjoyable for the passengers. One of their most important functions is to help passengers in case of an emergency. They instruct passengers in the use of emergency equipment. They need to know first aid for any passenger who might become ill during the flight. On many
flights they serve cocktails and meals.

Where they work.--They are stationed in major cities at the large airline bases. Large airplanes like the Boeing 747 may carry as many as sixteen flight attendants.

Training.--Posed, tactful and resourceful people can be good flight attendants. To be able to talk to strangers is an asset. They must be high school graduates, at least nineteen years of age. Two years of college, nurses' training and experience in dealing with the public are preferred. To speak a foreign language fluently is necessary for international flight attendants. Most large airlines give their own training courses which

sirven bebidas y comidas.

Donde trabajan.--Están estacionadas en las bases de aeropuertos grandes en las ciudades mayores. Los aviones grandes como el Boeing 747 pueden llevar diez y seis camareras.

El entrenamiento.--Las personas con buena apariencia, tacto y con recursos pueden ser buenas camareras. Poder hablar con extranjeros es una ventaja. Deben haberse graduado de la escuela secundaria y tener a lo menos diez y nueve años. Es preferible que las camareras tengan dos años de colegio, entrenamiento para enfermera y experiencia en tratar con el público. Para las camareras
last about five weeks. Assignments are based on seniority; thus, experienced attendants get the choice base and choice flights. Opportunities to advance would be as flight service instructor, customer service director, or recruiting representative.

Earnings.--The average monthly salary of flight attendants in 1976 was $1,042. Beginning salaries for domestic flights were approximately $700.00 while those on international flights internacionales, se les requiere que hablen una lengua extranjera. La mayoría de las aeronaves dan su propio entrenamiento que dura cinco semanas. Como las asignaciones son basadas en la prioridad por experiencia, las camareras con experiencia reciben la base preferida y los vuelos selectos. Si alguna persona acepta las oportunidades para avanzar puede tomar una posición como instructor de vuelos, director de servicios de clientes o representante de recluta.

El salario.--El promedio del salario de las camareras de vuelo en 1976 fue $1,042. Los salarios para los vuelos domésticos eran aproximadamente $700.00 mientras los vuelos
flights averaged beginning above $850.00. Flight attendants and their families are entitled to reduced fare benefits.

Work may be on holidays, weekends, and nights. Many have fifteen days or more off per month. When they are away from their home bases, the airlines provide for food and hotel accommodations. Flight attendants have the opportunity to meet interesting people and free time. They must also stand and be pleasant and efficient no matter how tired they may be.

Local Bus Drivers

What they do.--They follow assigned routes over city streets. Some drivers

Internacionales empiezan con más de $850.00. Las camareras y sus familias reciben precios reducidos.

El trabajo puede ser en las vacaciones, los fines de semana y las noches. Muchas tienen quince días o más de descanso cada mes. Cuando están fuera de la ciudad la aerolínea paga sus comidas y sus hoteles. Las camareras tienen la oportunidad de conocer gente interesante y tiene bastante tiempo libre. Deben estar de pie y ser agradables a pesar de lo cansadas que estén.

El conductor de autobús

Lo que hacen.--Siguen las rutas asignadas de la ciudad. Algunos
begin their routes at the terminal. Others relieve drivers at appointed intersections. Sometimes they operate chartered buses.

Where they work.—Most work for public transit companies. Some work for privately owned transit lines. Some work for sightseeing companies. Most work in large cities.

Training.—A high school education is preferred. A good driving record is essential. Many states require a chauffer's license. Most transit companies have their own training schools. Trainees must memorize and drive every run before conductores empiezan sus rutas en las estaciones. Otros empiezan en ciertas bocacalles. Algunas veces operan autobuses que se alquilan.

Donde trabajan.—La mayoría trabaja para los sistemas públicos de tránsito. Otros trabajan para líneas de tránsito privadas. Algunos trabajan para líneas de turismo. La mayoría trabaja en las ciudades grandes.

El entrenamiento.—Una educación de la escuela secundaria es preferida. Es escencial tener buenas recomendaciones como chofer. Muchos estados requieren una licencia de conductor. La mayoría de las compañías de tránsito tienen sus
graduating. Many transit companies require that the trainees pass both a written and a driving examination.

Experienced drivers may be promoted to instructor, supervisor, or dispatcher.

Earnings and the future.--According to the Bureau of Labor Statistics $5.30 per hour was the average wage in Houston, Texas.

Employment of local drivers is expected to increase during the 1980's. Many cities are trying to improve local bus service in order to reduce the number of cars used by commuters.

propias escuelas de entrenamiento. Los aprendices deben memorizar y manejar cada ruta antes de graduarse. Muchas compañías de tránsito requieren que los conductores pasen un examen escrito y de manejar.

Los conductores con la experiencia pueden avanzar a instructor, a supervisor, o expedidor.

El salario y el futuro.--El promedio por hora es de $5.30 en Houston Texas, según La Oficina de Estatística de trabajo.

El empleo de conductores locales se espera que crezca durante los 1980. Muchas ciudades tratan de mejorar el servicio local de los autobuses para reducir el número de autobuses usados diariamente por los viajeros.
Long Distance Truck Drivers

What they do.—They haul merchandise from one city to another. Sometimes they are on the road for at least a week before they return to their home base. Sometimes there are two drivers in one truck. One sleeps while the other drives. Night travel is preferred because the roads are more passable. The drivers inspect the trucks to be sure that they are all in safe operating order. At the end of a run they must file a report required by the United States Department of Transportation. Some drivers load and unload their trucks. Auto transport drivers, gasoline tank truck drivers and furniture van drivers supervise or help with loading and unloading.

Los conductores de camiones de larga distancia

Lo que hacen.—Llevan la mercancía de una ciudad a otra. Algunas veces viajan por lo menos una semana. En algunos camiones hay dos conductores. Uno duerme mientras el otro maneja. Los conductores prefieren manejar de noche porque es más fácil. Los conductores examinan los camiones para estar seguros que están listos para manejar. Al fin de un viaje deben llenar un reporte requerido por el departamento de transportación. Algunos conductores que transportan automóviles, cisternos de gasolina y muebles supervisan o ayudan a cargar y descargar.
Where they work.--Most live near large cities that have many truck terminals. Some work for trucking companies that offer service to all businesses. Others work for manufacturers that own trucks and operate independently or lease their services to trucking companies.

Training.--The U.S. Department of Transportation establishes minimum standards for long distance truck drivers. They must be twenty-one years of age, pass a physical examination, and have a good driving record.

Donde trabajan.--La mayoría viven cerca de las ciudades grandes que tienen muchas estaciones de autobuses. Algunos trabajan para las compañías que ofrecen servicios a todos los negocios. Otros trabajan para fabricantes que tienen camiones para transportar sus propios productos. Algunos tienen sus propios camiones y operan independientemente o alquilan sus servicios a las compañías de camiones.

El entrenamiento.--El departamento de transportación establece las reglas fijas para los conductores de camiones de larga distancia. Deben tener veinte y un años de edad, pasar un examen físico y tener buen expediente de manejar.
Interest Questions

1. Do you enjoy creating beautiful objects?
2. Are you told often that your ideas are good?
3. Would you like to live in a cultural center?
4. Would you be willing to work at a job that would not offer benefits such as vacations and pension plans?
5. Would you be willing to travel?
6. Would you be willing to receive irregular paychecks?
7. Are you willing to work irregular hours?
8. Can you work on your own without supervision?
9. Can you start a project and carry it through to the end?
10. Are you willing to work hard without recognition?

Preguntas de interés

1. ¿Le gusta crear objetos hermosos?
2. ¿Le dicen seguido que sus ideas son buenas?
3. ¿Le gustaría vivir en un centro cultural?
4. ¿Estaría dispuesto a trabajar en un empleo que no ofrece beneficios como vacaciones y pensión?
5. ¿Estaría dispuesto a viajar?
6. ¿Estaría dispuesto a recibir un sueldo irregular?
7. ¿Estaría dispuesto a trabajar horas irregulares?
8. ¿Puede trabajar sin supervisión?
9. ¿Puede empezar un proyecto y terminarlo?
10. ¿Estaría dispuesto a trabajar sin reconocimiento?
Vocabulary
1. available
2. supplement
3. will
4. to perform
5. Bachelor's degree
6. unemployment compensation
7. sick leave
8. furniture
9. knowledge
10. the schedule

Introduction
Singing, dancing and acting and instrumental music are included in the performing arts. Their common aim is to affect the emotions of the audiences as they interpret the human experience. Only 2% of the total employment in all occupations is involved in art, design, and communications. Because full-time positions are not

El vocabulario
1. disponible
2. aumentar
3. la voluntad
4. desempeñar
5. un licenciado
6. el subsidio de paro
7. la baja por enfermedad
8. los muebles
9. el conocimiento
10. el horario

La introducción
Las artes amaestradas son: el canto, el baile, actuando en el teatro, y la música instrumental. La intención de estas artes es de afectar las emociones del público como interpretar la experiencia humana. Solamente dos por ciento del empleo total en todas las ocupaciones está
always available, many artists supplement their incomes by teaching or doing work in different types of occupations.

Many years must be spent in intensive training and practices before an artist is ready for public performance. Natural talent, a willingness to work hard, great interest in a chosen area and luck are considered necessary.

The following readings contain job descriptions of musicians, interior decorators, floral designers, photographers and newspaper reporters.
Musicians

What they do.—A musician generally specializes in either classical or popular music. He may play in a symphony orchestra or jazz combo. The dance bands might play in night clubs, restaurants or at special parties. The symphony musicians might be found with opera, theater or ballet orchestras. In addition to performing, many musicians teach in schools, colleges and give private lessons. Some combine work as performers with careers as arrangers or composers. Some specialize in library science for work in music libraries.

Los músicos

Lo que hacen.—Un músico generalmente se especializa en la música clásica o popular. Puede tocar en una orquesta de la sinfónica, una banda de baile, o un conjunto de jazz. Las bandas pueden tocar en los clubs nocturnos, en los restaurantes, o en fiestas especiales. Los músicos de la sinfónica se encuentran en la opera, el teatro o el ballet. Además de saber tocar la música, muchos músicos enseñan en las escuelas, los colegios y dan lecciones privadas. Algunos combinan el trabajo de músico con la carrera de compositores. Algunos se especializan en la ciencia bibliotecaria para trabajar en las bibliotecas musicales.
Where they work.--Most performing musicians work in cultural centers such as New York and Los Angeles. The Armed Services also offer musician opportunities.

Training.--Many years of intensive practice and advance study with a master musician are necessities for accomplishment. Over 500 colleges provide bachelor's degree and above in vocal and instrumental music performance, composition, and theory. Musical talent, poise, stage presence, creative ability, self-discipline and physical stamina are important to success in a musical career.

Donde trabajan.--La mayoría de los músicos trabajan en los centros culturales, como New York y Los Angeles. Los servicios militares también ofrecen a los músicos las oportunidades de una carrera.

El entrenamiento.--Muchos años de práctica intensiva y el estudio avanzado con un maestro de música son necesarios para la ejecución. Más de 500 colegios ofrecen el licenciado en música, la interpretación, la composición y la teoría. El talento de músico, la elegancia, la habilidad creativa, la autodisciplina y la resistencia física son importantes al éxito en una carrera de música.
Earnings.—Geographic location as well as professional reputation have much to do with the amount of wages received. Salaries range from $300 to $500 a week in major symphonies. Mayor symphony orchestras generally play all year. But metropolitan and community orchestras have much shorter seasons. Due to the uneveness of work, musicians generally have other jobs that are more reliable. They usually work at night and on weekends. There may be travel involved in performing engagements. Because they may not work steadily for one employer, some performers cannot qualify for unemployment compensation and few have sick leave or paid vacations.

El sueldo.—La posición geográfica igual que la reputación profesional tienen mucho que ver con la cantidad de sueldo recibido. El sueldo varía de $300 a $500 por semana con las sinfónicas mayores. Las orquestas mayores de sinfónica tocan generalmente todo el año. Las orquestas metropolitanas o de la comunidad tienen las estaciones más cortas. Debido a la irregularidad del trabajo los músicos generalmente tienen otros empleos que son más seguros. Trabajan por la noche o los fines de semana. Algunos viajan para dar conciertos. Porque no trabajan regularmente, algunos no pueden calificar para el subsidio de paro y pocos reciben pagos por días que están enfermos o por vacaciones.
Interior Decorators

What they do.--Interior decorators supervise and plan the design and arrangement of private and commercial building interiors and furnishings. Most designers after considering the budget and tastes of their clients, prepare sketches of their plans. If the client approves the plans and cost, the designer may look for furnishings and supervise the work to be done.

Where they work.--They work often in large cities. Some experienced designers have their own shops. Some work for department stores, furniture stores or hotel and restaurant chains.

Los decoradores

Lo que hacen.--Los decoradores supervisan y hacen planes para el diseño y el arreglo de los interiores de los edificios, casas y muebles. Después de considerar el presupuesto y los gustos del cliente, el decorador puede buscar los muebles y supervisa el trabajo.

Donde trabajan.--Trabajan muchas veces en las ciudades grandes. Algunos decoradores con experiencia tienen sus propias tiendas. Algunos trabajan para los almacenes grandes, mueblerías, hoteles y restaurantes.
Training.---Formal training in a three year professional school of interior design, or four year bachelor's degree program is very important for entry into this field. Freehand and mechanical drawing, architecture, knowledge of furnishings, art objects, antiques and materials is very important. Classes in sales and business subjects can be valuable. They generally begin their careers as shoppers, sales people, receptionists or stockroom assistants. Usually, on the job training is required before a trainee can be advanced to the position of designer.

Earnings and future.---Beginners are paid salary plus commission. Starting
salaries may range from minimum wage to $200 per week plus commission. The experienced designers might work on commission only, salary plus commission or salary only. Work hours could be long and irregular as designers must adjust their work schedules to suit the needs of their clients. Interior design is competitive. It requires talent, business ability, and training. Population growth, higher personal incomes, increased spending for home and office furnishings should contribute to their use.

Floral Designers

What they do.--They arrange flowers and leaves.
into a design to express the feelings of the sender. They must know the names and qualities of the flowers. They arrange bouquets, corsages, wreaths and dried flowers. Often they decorate for weddings and parties. A designer works from a written order indicating color and type of flower, occasion, price, date, time and place to be delivered. They might help customers select flowers, plants, gifts and floral accessories from the shop.

Where they work.—Most work in small florist shops. Some work in large department stores.

diseño expresando los sentimientos del que envía las flores. Deben saber los nombres y las calidades de las flores. Arreglan los ramos, los ramilletes, las coronas y los arreglos de flores secas. Muchas veces decoran para las bodas y las fiestas. Una diseñadora trabaja de una orden escrita indicando el color y el tipo de flor, la ocasión, el precio, la fecha, la hora y el sitio donde debe ser entregado. Las diseñadoras pueden ayudar a los clientes a escoger las flores, las plantas, y los regalos de la floristería.

Donde trabajan.—La mayoría trabajan en floristerías pequeñas. Algunas trabajan en los almacenes grandes.
Training.—Courses in floral arranging are offered at junior colleges and commercial floral design schools. On-the-job training will give experience in creativity, speed and accuracy. After two years of on-the-job training a person can become an experienced designer. Good color perception, and the ability to arrange shapes in attractive patterns is essential. Legible handwriting and simple arithmetic are helpful.

Advancement.—Those who can supervise may advance to manager or design supervisor in large flower shops. It is possible to open one's own shop.

El entrenamiento.—Las clases en el arreglo de flores son ofrecidas en los colegios de dos años y en las escuelas comerciales de diseño floral. El entrenamiento en el empleo da la experiencia en la creatividad y la rapidez con que se trabaja. Después de dos años de entrenamiento en el empleo una persona puede ser una diseñadora de experiencia. Buena percepción de color y la habilidad de arreglar las formas en diseños atractivos es esencial. La letra legible y la matemática sencilla son útiles.

El avance.—Esos que pueden supervisar pueden avanzar a director. Es posible abrir su propia floristería.
Earnings and future.--

Usually florists earn between the minimum wage and $6.00 per hour. Generally they work long hours around holidays. Employment for florists is expected to increase. Population growth and rising income will cause this increase.

Photographers

What they do.--Skillful photographers capture the mood of scenes or the personalities of people they photograph. They use a variety of cameras, lenses, colored filters, electronic flashes, floodlights and other special equipment. The procedures in still photography are very different from those in cinematography. Many photographers specialize in one or the other, although

El sueldo y el futuro.--

En general ganan entre el mínimo a $6.00 por hora. Trabajan las horas largas durante las vacaciones y las fiestas. El empleo se espera que crezca. El crecimiento de la población y los ingresos crecientes causarán un aumento significante.

Los fotógrafos

Lo que hacen.--Los fotógrafos hábiles captan las escenas o las personalidades de las personas que fotografían. Usan una variedad de cámaras, de lentes, los filtros de colores, las luces de relámpagos, los reflectores, y otros equipos especiales. Los procedimientos en la fotografía son muy diferentes a los de la cinematografía. Muchos
there is a demand for photographers with training in both areas. Portrait, commercial and industrial photographers often work in their own studios except for special events such as weddings, dances and christenings. In small studios portrait photographers might even develop their own negatives, keep records and collect bills.

Commercial photographers photograph a great variety of subjects for catalogs and magazines. Large groups, buildings, livestock and manufactured articles are common subjects. Industrial photographers take pictures of workers operating machinery.
for use in industrial production. Special photographic techniques such as ultraviolet photography and infra-red photography are used to see subjects that generally are not visible.

Where they work.—Commercial studios, newspapers and magazines, government agencies, and photographic equipment suppliers employ photographers. Some work free-lance selling their photos to advertisers, magazines, and other customers. Jobs are mostly found in heavy populated areas.

industriales sacan fotos de trabajadores operando las máquinas para uso en la producción industrial. Los técnicos fotográficos especialmente como la fotografía ultravioleta e infrarroja son usados para ver los sujetos que generalmente no son visible.

Donde trabajan.—Los estudios comerciales, los periódicos y las revistas, las agencias del gobierno y los proveedores del equipo fotográfico emplean a los fotógrafos. Algunos trabajan independientemente vendiendo sus fotos a los publicitarios, a las revistas y a otros clientes. Los empleos se encuentran más en las áreas con mucha población.
Training.--Art schools, colleges, junior colleges and universities offer photographic training. One can prepare for work as photographer in a commercial studio with two or three years of on-the-job training.

Earnings.--Beginning photographers earn between $200 to $250 per week. Most experienced photographers earn between $12,000 to $15,000 per year.

Salaried photographers work a five day week and receive benefits. Freelance, press and commercial photographers travel and frequently have to work in uncomfortable surroundings. Work can be dangerous for news photographers assigned...
to natural disasters and military conflicts.

**Newspaper Reporters**

*What they do.*—They collect information on current events and use it to write articles for publication in newspapers. They may interview, review public documents, attend news events, and do research. Reporters use notes or tape recorders to collect facts. They write their stories in the office. Large newspapers may assign reporters to daily "beats". Specialized reporters might cover only certain areas such as medicine, religion, or business. Some reporters for small newspapers may also take photographs, write editorials and lay out copy.

fotógrafos de prensa asignados a los desastres naturales y los conflictos militares.

**Los periodistas**

*Lo que hacen.*—Coleccionan la información sobre las actualidades y las usan para escribir los artículos para la publicación en los periódicos. Pueden entrevistar, examinar los documentos públicos, asisten a los acontecimientos importantes e investigan para escribir un artículo. Los periodistas usan los apuntes o gravadoras para coleccionar las realidades. Escriben sus historias en la oficina. Los grandes periódicos pueden asignar los periodistas a un sitio especial. Pueden cubrir temas como la medicina, la educación, la religión.
Training.--Applicants need a college education. Some editors prefer a masters degree in journalism.

Useful high school courses include English, journalism, and typing. The ability to write and read a foreign language could prove very helpful. Because news reporting is a great responsibility, a reporter should be dedicated to impartial and accurate reporting of the news. If one has curiosity, initiative, persistence, and accurate memory

el entrenamiento.—Los aplicantes necesitan la educación del colegio. Algunos editores prefieren un licenciado en el periodismo.

Las clases útiles de la escuela secundaria incluyen el inglés, el periodismo, y la mecanografía. La habilidad de leer y escribir una lengua extranjera puede ser muy útil. Porque el periodismo requiere mucha responsabilidad, un periodista debe ser dedicado a comunicar con imparcialidad y precisión. Si tiene la curiosidad, la iniciativa,
and the physical stamina necessary for a fast-paced life, one might enjoy reporting for large papers. An experienced reporter can become a columnist, correspondent, editorial writer or top executive.

**Earnings.**—The Newspaper Guild had average starting salaries of $10,600 in 1976. With four or five years newspaper experience, the salary jumps $5,000. Reporters working for morning papers generally start work in the afternoon.

Paid vacations, group insurance and pension plans
are standard.

The future.--Employment will increase slowly due to the expanding communications field. Bright young, energetic writers will have the best opportunity to be hired. Also those who can write on technical areas will be in demand.

Service Occupations

Interest Questions
1. Do you like to work with people?
2. Do you enjoy doing things for people?
3. Can you follow instructions?
4. Do you enjoy flexible hours?
5. Do you enjoy using appliances?

Preguntas de interés
1. ¿Le gusta trabajar con la gente?
2. ¿Le gusta servir a la gente?
3. ¿Puede seguir instrucciones?
4. ¿Puede trabajar horas flexibles?
5. ¿Le gusta usar los aparatos?
6. Do you have the ability to stand for a long period of time?
7. Do you enjoy working on commission?
8. Are you bored by repeating the same activity?
9. Do you enjoy working in all kinds of weather?
10. Do you enjoy working with your hands?

Vocabulary
1. the custodian
2. the heating
3. the wood
4. the vacuum
5. simple
6. to cut
7. the headdressing
8. the makeup
9. the business
10. the hairdos
11. the equipment
12. the decline
13. the judgement

6. ¿Puede trabajar de pie por mucho tiempo?
7. ¿Le gusta trabajar por comisión?
8. ¿Se cansa fácilmente de la misma actividad?
9. ¿Le gusta trabajar en toda clase de tiempo?
10. ¿Le gusta trabajar con las manos?

El vocabulario
1. el portero
2. la calefacción
3. la madera
4. el aspirador
5. sencillo
6. cortar
7. el peinado
8. el maquillaje
9. el negocio
10. los peinados
11. el equipo
12. la disminución
13. el juicio
Introduction

The main areas of service occupations are food service, cleaning, personal services, protective services, and private household services. Training and skill requirements differ greatly. For many service occupations personality traits and special abilities can be just as important as formal schooling. Some service workers go into business for themselves.

La introducción

Las áreas principales de las ocupaciones de servicio son de la comida, de limpiar, de servicios personales, de servicios protectivos y de servicios de la casa. El entrenamiento y los requisitos de habilidad varían mucho. Para muchas ocupaciones de servicio los aspectos de la personalidad y las habilidades especiales pueden ser tan importantes como la escuela formal. Algunos trabajadores de servicios construyen sus propios negocios.
Though the number of private household workers has declined in recent years, the remaining service areas show a rapid rate of growth. Protective services is one of the fastest moving areas.

### Building Custodians

**What they do.**—They clean buildings, hospitals, apartment houses and stores. They maintain heating and ventilating equipment. They use many different types of cleaning materials and tools. They work in office buildings, hospitals, schools, factories, etc. Most of the jobs are found in highly populated areas.

### Los porteros de los edificios

**Lo que hacen.**—Limpian los edificios, los hospitales, los apartamentos, y las tiendas. Mantienen la calefacción y el equipo de la ventilación. Usan muchos tipos de materiales y herramientas para limpiar. Algunos supervisan a otros empleados. Trabajan en los edificios de oficina, los hospitales, las escuelas, las fábricas, etc. La mayoría de los empleos se
Training.--A beginner should be able to follow instructions and know simple math. High school shop courses would be important. In some cities, union and agencies teach programs in custodial skills. As part of their training they learn to operate wet and dry vacuums, and polishers. Sometimes they work outdoors—shoveling, sweeping, and mowing. If there is a large maintenance staff, custodians can be promoted to supervisory jobs.

se encuentran en las áreas de mucha población.

El entrenamiento.--Un principiante debe seguir instrucciones y saber matemáticas sencillas. En la escuela secundaria las clases de metal o madera serían importantes. En algunas ciudades, el sindicato y las agencias enseñan programas en las habilidades del portero. Como parte de su entrenamiento aprenden a operar aspiradoras eléctricas, húmedas y secas y pulidores. Algunas veces trabajan al aire libre paleando, barriendo y cortando gramas. Si hay un conjunto grande que mantener, el portero puede avanzar a inspector.
Earnings and the future.--

In 1976 building custodians averaged $3.63 per hour. Most receive standard employee benefits. Many custodians work night shifts. Employment in custodial work is considered good. Opportunities for part-time and night work will be particularly good.

Cosmetologist

What they do.--The task of the cosmetologist is to help people look attractive. They cut, style, color, straighten and give permanents to hair. They may also give manicures, facials, make-up analysis and scalp treatments. Many make appointments and keep records of hair color formulas.

El sueldo y el futuro.--

En 1976 los porteros ganaban un promedio de $3.63 por hora. La mayoría reciben los beneficios normales para los empleos. Muchos porteros trabajan por la noche. El empleo en el trabajo del portero se considera bueno. Las oportunidades para trabajo de medio día y trabajo de noche serán particularmente buenas.

El peluquero

Lo que hacen.--La tarea de un especialista de belleza es ayudar a la gente parecer atractiva. Cortan, estilan, pintan, enderezan y dan permanentes al cabello. Pueden también hacer la manicura, dar masajes faciales, dar el análisis del maquillaje y los tratamientos del
They must keep their work areas clean and sanitize their hairdressing implements. If they operate their own salon, they hire and supervise workers, keep records and order their own supplies.

Where they work.--Most work in beauty salons. Some work in barber shops, department stores, hospitals and hotels. Many operate their own businesses. Cities like New York, Los Angeles and other centers of fashion and the performing arts are considered to be the trend setters in hair fashion.

cuero cabelludo. Muchos toman citas y hacen notas sobre las formulas del color del pelo. Deben de tener limpias sus areas del trabajo y tener limpios los instrumentos de peluquería. Si manejan su propio salón, ocupan y supervisan a los trabajadores, arreglan papeles y ordenan el surtido de la mercadería.

Donde trabajan.--La mayoría trabaja en salones de belleza. Algunos trabajan en barberías, almacenes, hospitales y hoteles. Muchos operan sus propios negocios. Las ciudades como New York, Los Angeles y otros centros de moda y las artes marcan el tono en los estilos de peinados.
Training and other qualifications.--All states require cosmetologists to be licensed, but the requirements vary. Instruction is offered in public and private vocational schools in daytime or evening classes. A daytime course can be completed in nine months to a year. Night time classes take longer. The schools provide the necessary equipment and include the cost in the tuition fee. Students practice on manikins and each other. After some experience, they practice on manikins in school clinics. After graduation from an accredited school the students must pass a state licensing exam. They must be willing to keep up with new hairstyles and if they

El entrenamiento.--Todos los estados requieren que los peluqueros tengan licencias, pero los requisitos varían. La instrucción se ofrece en las escuelas vocacionales, públicas y privadas por el día y por la noche. Un curso de día se puede completar en nueve meses a un año. Las clases de noche duran más. Las escuelas dan los materiales necesarios e incluyen el costo en la matrícula. Los estudiantes practican en modelos en las clínicas de la escuela. Después de la graduación de una escuela aprobada el estudiante debe pasar un examen para la licencia. Deben tener el deseo de aprender los peinados nuevos y si abren su propio salón, las
open their own salon, business skills will be necessary. They may advance to owning their own shops or teaching in cosmetology schools or demonstrating cosmetics in local department stores.

**Earnings.**—They receive tips from clients plus a percentage of the money they bring in for the shop they work for, usually fifty percent. It is not unusual for a cosmetologist to earn $300 to $350 per week. Where the salon is located, the tipping habits of the clients, competition from other salons and the cosmetologists' ability to attract and hold clients are all very important.

El sueldo.—Reciben propinas de los clientes y un porcentaje del dinero que ganan para su tienda, de costumbre, cincuenta por ciento. Un peluquero puede ganar $300 a $350 por semana. La localidad del salón, las costumbres de propinas, la competencia de los otros salones y grupos profesionales y sindicatos que representan a los peluqueros son muy importantes.
Telephone Operators

What they do.--They assist clients in making phone calls, contact police and fire departments for emergencies and arrange conference calls for business executives. There are two types of operators: those who work for a central phone company and those who work for private corporations. Operators for the telephone company may handle long-distance calls or give directory assistance.

Training and other qualifications.--High school graduation, a pleasant speaking voice, good hearing, not minding sitting at the switchboard for long periods of time are all qualities.

Los telefonistas

Lo que hacen.--Asisten a los clientes en telefonear, ponerse en contacto con la policía y el departamento de fuego para emergencias y arreglar llamadas de conferencia para ejecutivos de negocios. Hay dos tipos de operadores: los que trabajan para una compañía de teléfono central y los que trabajan en las corporaciones privadas. Los telefonistas pueden hacer conferencias inter-urbanas o dar asistencia de la guía telefónica.

El entrenamiento y otras calificaciones.--La graduación de la escuela secundaria, una voz amable, buen oído y la habilidad de sentarse a la centralista de teléfonos por
necessary for a good telephone operator. New operators are taught how to record calls and use the equipment. Instruction and practice generally last about three weeks. Operators with experience may be promoted to supervisory positions or transfer to clerical occupations such as secretary. They might advance to telephone craft workers such as installers or repairers.

**Earnings and the future.**

The hourly wage average is approximately $6.00. Starting wages can be as low as $3.90 per hour. In central telephone companies telephone service will be used on a 24-hour basis.

El sueldo y el futuro.

El sueldo por hora es aproximadamente $6.00. El sueldo principiante puede ser tan bajo como $3.90 por hora. En las compañías centrales el servicio de
hour basis. Telephone operators participate in normal fringe benefits according to the company they work for. There will be a slight decline in the number of operators needed due to electronic switching systems in central offices.

Police Officers

What they do.—The security of the cities and communities depends on the police. They have many duties in small communities. They may direct traffic at a fire, investigate a burglary or give first aid. In a large department the officers are assigned to specific duties. Most are assigned to patrol or traffic duty.

teléfono se usa veinticuatro horas. Participan en los beneficios normales según la compañía donde trabajan. Habrá una disminución en el número de telefonistas debido a los sistemas electrónicos en las oficinas centrales.

La policía

Lo que hacen.—La seguridad de las ciudades y las comunidades depende en la policía. Tienen muchas tareas en pequeñas comunidades. Pueden dirigir un fuego, investigar un robo o dar primeros auxilios. En un departamento grande los oficios son asignados a tareas específicas. La mayoría se asignan a estar de patrulla o dirigiendo el tráfico.
Where they work.--
Approximately 500,000 officers worked for local police departments in 1976. A large city such as New York may employ over 30,000 officers. A small city may employ as few as twenty-five.

Training.--A candidate must be a United States citizen, twenty-one years of age, with a certain height and weight standards. Physical agility and strength as well as honesty, good judgement, and a sense of responsibility are very important. Some cities require college training. More than 1,000 programs are available in law enforcement and criminal justice.

Donde trabajan.--
Aproximadamente 500,000 agentes de policía trabajaban para los departamentos locales de la policía en 1976. Una ciudad grande como New York puede emplear más de 30,000 agentes de la policía. Una pequeña ciudad puede emplear tan pocos como veinticinco.

El entrenamiento.--
Un candidato debe ser ciudadano de los Estados Unidos, tener veintiún años y ser conforme a cierto peso y medidas. La agilidad física y la fuerza, tanto como la honradez, mucho juicio y la responsabilidad son muy importantes en la policía. Algunas ciudades requieren el colegio. Más de mil programas son disponibles en la
Police officers become eligible for promotion after specified lengths of service. They may specialize in traffic control, juvenile work, communications or laboratory work. Officers continue to take classes in crowd control, legal work, and new developments in law enforcement equipment. Some police departments pay all or part of the tuition for officers to work on their college degrees.

**Earnings.**—In 1976 entry level salaries were $11,600 on the average. Set increases are received until a certain

aplicación de la ley y de la justicia criminal.

La policía es elegible para promoción después de períodos específicos de servicio. Pueden especializarse en el control de tráfico, el trabajo juvenil, las comunicaciones o el trabajo de laboratorio. Los agentes continúan tomando clases en el control de las multitudes, el trabajo jurídico, los avances en el equipo de aplicación de la ley.

Algunos departamentos de la policía pagan todo o una parte de la colegiatura para que los agentes puedan seguir sus estudios de colegio.

**El sueldo.**—En 1976 los salarios principiantes fueron $11,600 como término medio. Los incrementos
level is reached. The police departments provide the required equipment. They may have to work outdoors in all kinds of weather. They have a high risk rate and may be required to work on weekends and holidays.

The future.--The job outlook is good, especially for those with training in law enforcement. Funding for law enforcement will have a high priority because police work is essential.

Cooks and Chefs

What they do.--A cook's work depends on the size of the restaurant he works for. In large restaurants each cook has a special

La policía provee el equipo necesario. Tienen que trabajar afuera en todas clases de tiempo. Tienen un indice alto de peligro y pueden ser requeridos a trabajar en los fines de semana y las vacaciones.

El futuro.--El futuro es bueno, especialmente para esos con entrenamiento en la aplicación de la ley. Los fondos para la aplicación de la ley tendran la primera oportunidad porque el trabajo de policía es esencial.

Los cocineros

Lo que hacen.--El trabajo de un cocinero depende en el tamaño del restaurante donde trabaja. En los restaurantes grandes cada
assignment and job title such as pastry cook. Head cooks or chefs coordinate the kitchen staff, plan menus, order food and decide serving sizes.

Training.--Many acquire their skills on-the-job, but an increasing number are taking vocational training in food preparation. Acquiring skills necessary to be a chef will require several years. High school courses in business arithmetic are helpful. Hotels and fine restaurants have the highest hiring standards. The Armed Forces are also a source of training in food work. Students learn to prepare food and care for equipment. Also sanitation and public

cocinero tiene una tarea especial y un título de trabajo como el cocinero de pasteles. Los jefes de la cocina coordinan los empleados de la cocina, planean los menús, ordenan la comida y deciden los tamaños de las porciones.

El entrenamiento.-- Muchos adquieren sus habilidades en el empleo, pero un gran número toma entrenamiento vocacional en la preparación de la comida. Aprendiendo las habilidades de ser jefe de los cocineros requiere muchos años. Las clases en la escuela secundaria en la matemática de negocios son útiles. Los hoteles y los restaurantes finos tienen las normas más altas para emplear. Los servicios militares son también
health rules for handling food are emphasized. The ability to work under pressure, to work in a team relationship and in close quarters is necessary for a cook.

Some cooks go into business for themselves as restaurant owners or caterers. Others become instructors in vocational programs or junior colleges.

Earnings.—In 1976 hourly rates ranged from $3.01 to $6.01 for chefs and from $3.90 to $5.30 for cooks. Some chefs make over $40,000 per year. They may work late at night, holidays and weekends.

una fuente del entrenamiento en el trabajo de la comida. Los estudiantes aprenden a preparar la comida y cuidar los utensilios. También las reglas de higiene y de la sanidad pública para tocar la comida tienen mucho énfasis. La habilidad de trabajar bajo la tensión, trabajar en grupos y encerrados es necesario para un cocinero.

Algunos cocineros son dueños de restaurantes. Otros llegan a ser instructores en programas vocacionales y colegios.

El sueldo.—En 1976 el sueldo por hora fue de $3.01 hasta $6.01 para jefes de cocina y desde $3.00 a $5.11 para los cocineros. Algunos jefes de cocina ganan sobre $40,000 por año. Pueden
The future.--There are always openings for cooks and chefs. As population expands, people continue to spend money on eating out. As more women work, incomes increase, leisure time expands, more and more people will be eating out in restaurants which will create a need for chefs.

El futuro.--Hay siempre empleos para cocineros y jefes de la cocina. Como crece la población, la gente continúa a gastar dinero en comidas en restaurantes. Como más mujeres trabajan, los ingresos aumentarán, el tiempo de descanso se extiende. Más y más gente comerá en restaurantes y se necesitarán más jefes de la cocina.

Health Occupations

Introduction

Approximately 5% of the total United States employment is engaged in health occupations. The number of health employees has grown, but their distribution is still...
a problem. They are heavily concentrated in heavily pop-
ulated cities. Population growth and the increasing
health consciousness of the
country has contributed to
increased demand for health
employees. There are many
job titles in the health
field that can be attained
without the education re-
quired to be a doctor, nurse,
or dentist.

The Vocabulary
1. the health
2. wounded
3. the bone
4. stiff
5. the assistant
6. typing
7. the insurance
8. simple

su distribución es aún un
problema. Están concen-
trados en las ciudades
grandes. El crecimien-
to de la población y el
interés en el mejora-
miento de la salud son
razones por la cual ha
crecido la demanda para
los centros de salud.

Hay muchos títulos del
empleo en las carreras
de la salud que pueden
ser obtenidos sin la
educación requerida para
ser doctor, enfermera o
dentista.

El vocabulario
1. la salud
2. herido, a
3. el hueso
4. duro, a
5. el ayudante
6. la mecanografía
7. el seguro
8. sencillo, a
9. the nurse
10. approved
11. beginning
12. growing
13. the raise
14. the technician
15. useful
16. the device
17. the body
18. the treatment
19. the blood
20. accuracy

Interest Questions

1. Do you have a deep concern for humanity?
2. Are you dependable?
3. Are you accurate in your work?
4. Would you like to work in a hospital?
5. Do you enjoy studying science?

1. ¿Tiene Ud. un gran interés para la humanidad?
2. ¿Puede uno depender en Ud.?
3. ¿Es Ud. preciso en su trabajo?
4. ¿Le gustaría trabajar en un hospital?
5. ¿Le gusta estudiar la ciencia?
6. Do you follow directions easily?
7. Do you have good manual dexterity?
8. Are you patient?
9. Are you emotionally stable?
10. Can you tolerate exposure to sickness and deformity?

Physical Therapists

What they do.--Physical therapists aid accident victims, crippled children and disabled older persons to overcome muscle, nerve, bone and joint injuries and disabilities. They use exercises, electrical stimuli, massage, heart, cold light and water to relieve pain or improve muscle conditions. Hospitals, nursing homes, rehabilitation centers, public health

Las terapistas físicas

Lo que hacen.--Las terapistas físicas ayudan a las víctimas de los accidentes, a los niños tu- llidos y a las personas mayores inválidas a vencer las heridas de músculos, de nervio, de hueso y de articulación. Usan los ejer- cicios, los estímulos eléctricos, los masajes, el calor, el frío, la luz y el agua para disminuir el dolor o mejorar las
agencies, doctors' offices, research organizations, and the Armed Forces all employ Physical Therapists.

Training.—One must have a state license to practice physical therapy. A state examination in physical therapy must be passed. A bachelor's degree is necessary. Competition is stiff for entrance. Patience, tact, and emotional stability are necessary. Many physical therapists advance to teaching, research, and administrative positions.

El entrenamiento.—Uno debe tener un licenciado del estado para practicar. Deben pasar un examen del estado en terapia física. Un licenciado de la universidad es necesario. Hay mucha competencia para entrar. La paciencia, el tacto y la estabilidad emocional son necesarias. Muchas terapistas físicas avanzan a enseñar, a investigar, y a las posiciones administrativas.
The future. -- Because of increased public recognition of the importance of physical therapy, employment is expected to increase. There is much competition for existing openings. Starting salaries average at about $11,000 per year as of 1976. Some therapists may earn over $25,000.

Dental Assistants

What they do. -- The assistant prepares the dental patient for treatment. The assistant hands the dentist the proper tools and helps clear the patient's mouth by using suction. Assistants also prepare materials for making tooth impressions and process x-ray film. Oral health instructions and preparation for sterilization is also done by the dental assistant.

El futuro. -- Los empleos para las terapistas físicas aumentarán por causa de que el público ha tomado un interés en esta profesión. Hay mucha competencia para los empleos que existen. El sueldo promedio empezaba con $11,000 por año en 1976. Algunos terapistas pueden ganar más de $25,000.

Los ayudantes de dentistas

Lo que hacen. -- El ayudante prepara al paciente del dentista para el tratamiento. El ayudante da al dentista los instrumentos apropiados y le ayuda a limpiar la boca del paciente usando la aspiración. Los ayudantes también preparan los materiales para hacer las impresiones de los dientes y revelan las radiografías.
assistant. Some even do the work of a dental secretary.

Where they work.--In 1976 almost 135,000 persons worked as dental assistants. They are found in private dental offices, dental schools, state and local public health departments and private clinics.

Training.--Some learn on-the-job. Many take special classes at junior colleges. Helpful high school classes would be biology, chemistry, health, typing and office practices. Some dental assistants become dental higienists. Others become sales representatives.

La instrucción de la salud oral y la preparación para la esterilización está hecha también por el ayudante del dentista. Algunos hacen el trabajo de un secretario dental.

Donde trabajan.--En 1976 casi 135,000 personas trabajaban como ayudantes dentales. Se encuentran en las oficinas dentales, los departamentos públicos del estado y de la ciudad y de las clínicas.

El entrenamiento.-- Algunas aprenden en el trabajo. Muchos toman clases especiales en los colegios. Las clases en la escuela secundaria que ayudarán al ayudante del dentista son la biología, la química, la salud, la mecanografía y las prácticas de oficina.
for firms that sell dental products.

**Earnings.**—In 1977 a high school graduate with six months general experience started at $7,000 a year. Experienced dental assistants working for the Federal Government were earning $9,100 in 1977. Generally they work Saturday mornings with a paid vacation. Some dentists provide medical insurance.

**Licensed Vocational Nurses**

What they do.—They provide nursing care that does not require the training of the R.N. They assist in caring for patients, infants, en cuidar a los pacientes, algunos ayudantes del dentista llegan a ser representantes para las compañías que venden los productos dentales.

**El salario.**—En 1977 un graduado de la escuela secundaria con seis meses de experiencia empezaba con $7,000 por año. Los ayudantes con experiencia que trabajan por el gobierno federal ganaban $9,100 en 1977. Generalmente trabajan los sábados por la mañana con vacaciones pagadas. Algunos dentistas proveen seguro médico.

**Las enfermeras**

Lo que hacen.—Proveen el cuidado que no requiere el entrenamiento de una enfermera registrada. Asisten en cuidar a los pacientes,
operate simple and sophisticated equipment. Some work in intensive care, burn units and recovery units.

Where they work.--Nurses are found in clinics, hospitals, doctor's offices, public health, welfare and religious agencies. Some are self employed, working in hospitals or in the homes of their patients.

Training.--Practical nurse training programs are usually one year long, including classroom study and clinical practice. Students study advanced science, los infantes y operan equipo sencillo y sofisticado. Algunos trabajan en cuidado intensivo, en los servicios de los heridos de quemadas y en los servicios de recuperación.

Donde trabajan.--Las enfermeras se encuentran en las clínicas, los hospitales, las oficinas de los médicos, las agencias de la salud pública, el centro de asistencia social y las agencias religiosas. Algunas trabajan para sí mismas, en hospitales o en casa de sus pacientes.

El entrenamiento.--El entrenamiento para la enfermera dura generalmente un año, incluyendo el estudio en clase y la práctica clínica. Los
nutrition, anatomy, first aid and many other practical classes in trade schools, junior colleges, through the Armed Services. They must graduate from an approved course of study and then pass a state examination. A career in practical nursing requires an emotionally stable person who can follow directions. Good health, physical stamina and a concern for others are considered important. Some LVN's continue their studies and become registered nurses.

Salary and the future.--
The average starting salary for LVN's in Texas was $9,000 in 1976. Many LVN's work on
weekends and holidays. Hospitals provide pay increases after specific periods of service. In private homes LVN's usually work an eight hour day and go home at night. Due to expanding public and private insurance plans and to a growing population, employment for nurses will rise rapidly.

X-ray Technologists

What they do.—X-ray technologists operate x-ray equipment and take x-ray pictures. Usually they are supervised by radiologists who are doctors specializing in the use of x-rays. They take x-rays of all parts of the body and are supervised by radiologists who are doctors specializing in the use of x-rays. They take x-rays of all parts of the body and are supervised by radiologists who are doctors specializing in the use of x-rays.

Los técnicos de rayos-x

Lo que hacen.—Los técnicos del equipo de radiología toman fotos de radiografía. Generalmente son supervisados por los radiólogos que son médicos que se especializan en el uso de rayos-x.
the human body. They apply radioactive material to help radiologists diagnose or treat and they use radiation-producing machines to give therapeutic treatments. In nuclear medicine they prepare radioactive solutions to be swallowed or injected by the patient. The technologist use scanners, special cameras, to pick up radioactivity in the body and operate special instruments that measure the intensity of radioactivity. They work in hospitals, medical laboratories, doctors' offices, health agencies and public school systems.

de las partes del cuerpo humano. Aplican el material radiactivo para ayudar a los radiólogos a diagnosticar o tratar, y usan las máquinas que producen la radiación para tratamientos terapeutas. En la medicina nuclear preparan soluciones radioactivas que son tomadas o inyectadas. Los técnicos usan las giratorias, las cámaras especiales para encontrar las actividades radioactivas en el cuerpo. Usan los instrumentos especiales que miden la intensidad de la radioactividad. Trabajan en los hospitales, los laboratorios, las oficinas de los médicos, las agencias de la salud y los sistemas de escuelas públicas.
Training.--X-ray technicians must complete a course in radio technology. They also must pass a written exam. Programs vary from two to four years. There is more chance of promotion for those holding a BS degree. Classes in Math, physics, chemistry, biology and typing are helpful. A desire to work with the sick and disabled as well as good health and emotional stability are personal qualifications necessary for this profession. Some technicians might advance to instructors and supervisors.

Earnings.--Starting salaries averaged $9,000 in 1976. An experienced

El entrenamiento.--Los técnicos de rayos-x deben terminar un curso en la tecnología de radioactividad y deben pasar un examen escrito. Los programas varían de dos años a cuatro años. Hay más oportunidades de avance para los que tienen un bachillerato. Las clases en matemáticas, la física, la química, la biología y la mecanografía son útiles. El deseo de trabajar con los enfermos y los invalidos tanto como buena salud y equilibrio emocional son los requisitos personales necesarios para esta profesión. Algunos técnicos pueden avanzar a instructores o supervisores.

El sueldo.--Los salarios principiantes fueron $9,000 en 1976. Un
technologist may earn $12,000 per year. Full-time technicians work forty hours a week though they may be on call on weekends. They receive regular hospital benefits. There are potential radiation hazards, though these hazards have been reduced through protection devices.

Medical Technologists

What they do.--The perform lab tests under the direction of pathologists who are doctors who diagnose the causes of diseases. They analyze blood, tissues and automatic analyzers. They perform delicate chemical, microscopic and technological tests. They make cultures of body tissue samples looking for bacteria.

técnico con experiencia puede ganar $12,000 por año. Los técnicos trabajan cuarenta horas por semana aunque pueden trabajar los fines de semana. Reciben los beneficios regulares de los hospitales. Hay peligros de la radiación, aunque han sido reducidos por los aparatos de protección.

Los técnicos médicos

Lo que hacen.--Hacen examenes de laboratorio bajo la dirección de los patólogos, que son los médicos que diagnostican las causas de las enfermedades. Analizan la sangre, los tejidos y los fluidos atravez del uso de un microscópio y los analizadores automáticos. Hacen examenes delicados,
They may type blood samples.

Where they work.--In 1976, 240,000 persons worked in hospital labs. Independent labs, clinics, doctors' offices, public health agencies and pharmaceutical companies are other employers.

Training.--Four years of college with a specialized program in medical technology are necessary. Junior colleges, vocational schools and universities have medical technology programs. Dependability, accuracy and the ability to work under pressure are important. They must be precise and thorough in their work.

Donde trabajan.--En 1976, 240,000 personas trabajaban en los laboratorios de los hospitales, los laboratorios independientes, las agencias de la salud pública y las compañías farmacéuticas.

El entrenamiento.--Cuatro años de colegio con un programa especializado en tecnología médica son necesarios. Los colegios, las escuelas vocacionales, y las universidades tienen los programas de tecnología médica. La
are desirable traits.

Salary and the future.—
Starting salaries averaged
$10,000 in 1976. They work
a forty hour week, though if
in a hospital, they can expect
night and weekend work. Hos-
pitals generally provide
vacation, sick leave and
retirement plans. Jobs will
increase due to wider use
by doctors of lab tests,
population growth, more
awareness of good health,
and more prepayment pro-
grams that make payment for
services easier.

El salario y el futuro.—
E promedio de los salarios
principiantes fue de $10,000
en 1976. Trabajan cuarenta
horas por semana aunque si
están en un hospital, pue-
den esperar trabajo por la
noche y los fines de semana.
Los hospitales generalmente
proveen las vacaciones, el
subsidio de enfermedad y
la pensión. Los empleos
crecerán debido a más uso
por los médicos de los labo-
ratorios, el crecimiento de
la población, y los progra-
mas médicos pagados por a-
delantado que hacen más
fácil el pago para los ser-
vicios de la salud.
Sales Occupations

Introduction

A person who likes to travel or who does not, one who prefers a salary or one who prefers to run his own business... there is room in sales for all these preferences. Sales workers who sell standardized merchandise are usually trained on the job by other sales clerks. The person selling complicated products and services need training and education. Some sales positions require a college major in engineering. A high school education is the minimum requirement. Salespersons are poised, meet strangers easily, communicate clearly. Individual discipline and initiative are necessary to

La introducción

Para una persona que le gusta viajar o a una que no le gusta viajar; para una persona que prefiere un salario o una persona que prefiere manejar su propio negocio... para estas, hay trabajos en los negocios de ventas. Los trabajadores de venta que venden la mercancía normal son entrenados en el empleo por los otros vendedores. La persona que da servicios y vende productos complicados necesita entrenamiento y educación. Algunas posiciones de venta requieren una especialización en la universidad en la ingeniería. Una educación en la escuela secundaria es el requisito mínimo. Los
locate new customers. The most openings will occur in retail sales positions.

Vendedores deben tener buena presencia, hacer amistades con desconocidos fácilmente, y comunicarse con claridad. La disciplina individual y la iniciativa son necesarias para encontrar los clientes. La mayoría de los empleos ocurren en las posiciones de venta.

Vocabulary

1. holidays
2. expand
3. Leisure
4. to eat out
5. equipment
6. team
7. to order
8. to become
9. strength
10. honesty
11. first aid
12. to be on patrol
13. decline
14. long distance calls

El vocabulario

1. las vacaciones
2. extender (ie)
3. el descanso
4. comer fuera de casa
5. el equipo
6. el equipo
7. mandar
8. volverse (ue)
9. la fuerza
10. la honradez
11. los primeros auxilios
12. estar de patrulla
13. disminución
14. las llamadas de larga distancia
Interest Questions

1. Do you enjoy talking to people you do not know?
2. Do you work well without supervision?
3. Do you enjoy planning and organizing your time?
4. Are you a competitive person?
5. Can you work well on an irregular salary schedule?
6. Do you like to travel?
7. Are you flexible?
8. Are you usually pleasant?
9. Do you assume responsibility easily?
10. Are you an action-oriented person?

Automobile Salespersons

What they do.--They wait on customers in dealer showrooms and used car lots. They generally negotiate the

Preguntas de interés

1. ¿Le gusta hablar con personas que no conoce?
2. ¿Trabaja Ud. bien sin supervisión?
3. ¿Le gusta planear y organizar su tiempo?
4. ¿Es Ud. una persona competitiva?
5. ¿Puede trabajar bien con un salario irregular?
6. ¿Le gusta viajar?
7. ¿Es Ud. flexible?
8. ¿Es amable generalmente?
9. ¿Acepta Ud. responsabilidad fácilmente?
10. ¿Es Ud. una persona de acción?

Los vendedores de automóviles

Lo que hacen.--Ayudan a los compradores en la sala de ventas y lotes de coches de segunda mano.
price. They fill out the necessary forms for registration and licenses. They sometimes arrange financing and car insurance. They set a delivery date and answer customers' questions. They gain customers' loyalty by mailing thank yous and car literature. They develop prospective customers and contact them by phone or mail. Most work in new car dealerships, the rest on used car lots.

**Training.**—Most training is on-the-job. Large dealers might have several days training in class to learn how to obtain leads and make presentations.

Generalmente tratan el precio. Llenan los formularios para el registro y la licencia. Algunas veces arreglan la financiación y el seguro del automóvil. Escogen una fecha de entrega y contestan a las preguntas de los clientes. Se ganan la lealtad de los clientes mandándoles a dar las gracias cuando compran un automóvil y enviándoles la literatura sobre los automóviles. La mayoría trabaja en compañías de automóviles nuevos. Los demás trabajan en los lotes de coches de segunda mano.

**El entrenamiento.**—La mayoría del entrenamiento es en el empleo. Las compañías grandes pueden tener varios días de entrenamiento en clase
Classes in English and public speaking will help build confidence in speaking to strangers. Dealers prefer older applicants for they inspire more confidence in buyers. Successful salespeople with managerial ability may advance to assistant sales manager or general sales manager.

**Earnings.**—Most sales-workers earn commissions. Many dealers pay a small salary so there will be a small steady income. Beginners are usually guaranteed a salary. Many dealers give bonuses for selling. They receive many benefits.

aprendiendo como obtener los nombres de clientes posibles y hacer presentaciones.

Las clases en inglés y en el arte de la oratoria ayudarán a darse confianza en hablar con los desconocidos. Los comerciantes prefieren a los aplicantes mayores porque inspiran más confianza en los clientes. Los vendedores que tienen éxito con la habilidad de manejar pueden avanzar a gerentes de venta.

**El sueldo.**—La mayoría de los vendedores ganan comisiones. Muchos comerciantes pagan un pequeño salario para que haya un ingreso constante. Los principiantes son generalmente garantizados un salario por unos meses. Muchos
They are furnished with demonstrator cars. Discounts are also received on cars bought for personal use. A salesperson who sells about 150 cars per month would make an average salary.

**Insurance Agents**

What they do.—Insurance agents sell policies that protect people and companies against future losses or financial pressures. They sell one of three types of insurance: life, casualty or health. Life insurance agents sell policies that protect the family, if the policy holder dies. Casualty agents sell policies that protect the holder from comerciantes dan premios por ventas. Los vendedores reciben beneficios. Reciben automóviles que usan para demonstrar. Reciben descuentos cuando compran sus propios automóviles. Los que venden 150 automóviles por mes ganan un salario de promedio.

**Los agentes de seguros**

Lo que hacen.—Los agentes de seguros venden las pólizas que protegen a la gente y a las compañías contra pérdidas del futuro o las presiones financieras. Venden uno de tres tipos de seguro: de vida, de accidentes o de enfermedad. Los agentes de seguro de vida venden pólizas que protegen a la familia si el dueño de la póliza muere.
theft, auto accidents and fire. Health insurance policies protect the holder against high medical costs due to illness. Many agents sell securities such as annuities or mutual funds shares. They spend time with the clients in their homes or businesses as well as their own offices preparing reports, designing insurance and making lists of prospective customers.

Where they work.—They work for insurance companies all over the country. About one-half specialize in life insurance. Some agents offer both property and life insurance.

Los agentes de seguro de accidentes venden pólizas que protegen al dueño contra robos, accidentes de automóviles y de incendio. Las pólizas de seguro de enfermedad protegen al dueño contra los gastos médicos. Muchos agentes venden planes asegurados como las anualidades o los fondos mutuales. Pasan tiempo con sus clientes en sus casas o sus oficinas tanto como en sus propias oficinas preparando reportes, escribiendo planes de seguro y escribiendo las listas de posibles clientes.

Donde trabajan.—Trabajan para compañías de seguros en todo el país. Cerca de la mitad se especializan en seguros de vida. Algunos agentes venden seguros de propiedad
Training.--High school graduates with sales ability are hired as well as college graduates. Classes in accounting, economics, and business law will be helpful. Insurance agents must pass a written examination to be licensed. Some study independently. Others take company classes or classes in junior colleges. Enthusiasm, self-confidence, the ability to communicate effectively and initiative are all needed to be a successful insurance agent.

Earnings.--Beginners receive a salary for the year of life.

El entrenamiento.--Los graduados de secundaria con la habilidad de vender tanto como los graduados del colegio reciben sueldos. Las clases en la contabilidad, la economía y la ley de negocios son útiles. Los agentes de seguros deben pasar un examen escrito para recibir sus licencias. Algunos estudian independientemente. Otros toman clases en la compañía o en los colegios de dos años. El entusiasmo, la confianza en sí mismo, la habilidad de comunicarse efectivamente y la iniciativa son todos necesarios para tener éxito como agentes de seguros.
first six months. Then they are paid on commission. The commission varies with the size of the policy, and whether the policy is a renewal or a new transaction. There is no formal limit to the earning power of an insurance agent. Some earn more than $100,000 per year. The average would be considered $30,000.

The future.—Many jobs are always open as beginners leave quickly because they are unable to maintain enough sales volume to maintain themselves and a family during the first year of employment. Life insurance is expected to provide educational and retirement policies for themselves and their families.

por los primeros seis meses. Después, reciben comisión. La comisión varía con el tamaño de la poliza, y si la póliza es renovada. No hay límite a lo que puede ganar un agente de seguros. Unos ganan más de $100,000 por año. El promedio es $30,000.

El futuro.—Hay posiciones para los agentes de seguros porque muchos de los agentes principiantes dejan el trabajo porque el sueldo no es suficiente para mantenerse a sí mismos ni a sus familias durante el primer año de empleo. Más y más personas están comprando seguros para pagar los gastos educativos y para jubilarse.
Real Estate Agents

What they do.--They represent property owners in selling and renting properties. They show and sell real estate, rental properties. They spend time on the phone talking to customers. Agents compare similar properties before listing a property for sale to compare its fair market value. They leave the office and call on prospects and drive them to inspect available properties. Most sell residential property. Others specialize in commercial or industrial real estate. Agents must know about the land, shopping facilities, transportation, utilities. Real estate agents must also be familiar with taxes and insurance rates.

Los agentes de bienes raíces

Lo que hacen.--Representan a los dueños de propiedades en vender y rentar las propiedades. Muestran y venden los bienes raíces y la propiedad de renta. Pasan tiempo por teléfono hablando con los clientes. Los agentes comparan las propiedades para vender para comparar su valor comercial. Salen de la oficina y visitan a los clientes y los llevan a inspeccionar las propiedades residenciales. Otros se especializan en los bienes raíces comerciales, la transportación, las utilidades. Los agentes de bienes raíces deben estar familiarizados con los impuestos y los precios de seguros.
Where they work.--
Real estate agents work for small and large firms. Some enter into franchise agreements with national or regional state organizations.

Training.--Most states require thirty hours of classroom instruction. Because real estate transactions have become more complex, large firms have turned to college graduates to fill sales positions.
Maturity, tact, enthusiasm, honesty, a neat appearance are all necessary to be a good real estate agent.
Experienced agents may advance to sales or general management.

Donde trabajan.--Trabajan para pequeñas y grandes compañías. Algunos entran en contratos con organizaciones nacionales y regionales.

El entrenamiento.--
Muchos estados requieren treinta horas de instrucción en clase. Las transacciones de los bienes raíces se han vuelto muy complicados. Las compañías grandes buscan graduados de los colegios para llenar las posiciones. La madurez, el tacto, el entusiasmo, la honradez, la paciencia--todos estos son necesarios para ser buenos agentes de bienes raíces. Los agentes con experiencia pueden avanzar a la venta o la administración general.
Earnings.—Most real estate agents work on commission. The rates of commission is generally divided between the agent and the firm. An experienced real estate agent might earn more than $40,000 per year. An average salary might be $15,000 per year. Starting commissions might be irregular. A starting agent should have extra money to live on until the sales increase. Some large firms furnish standard employee benefits.

The future.—There will be many openings in real estate during the 80's due to a growing demand for housing. Many people

El sueldo.—La mayoría de los agentes de bienes raíces trabajan por comisión. Las comisiones varían según el tipo de propiedad y su valor. La comisión se divide generalmente entre el agente y la compañía. Un agente con experiencia puede ganar más de $40,000 por año. Un salario promedio puede ser $15,000 por año. Las primeras comisiones pueden ser irregulares. Un agente principiante debe tener dinero para vivir hasta que sus ventas crezcan. Algunas compañías grandes dan beneficios.

El futuro.—Habrá muchas posiciones en los bienes raíces durante el década de los 1980, debido a la gran demanda
transfer to other kinds of work after trying real estate, so replacement needs are great. There are not many people working part-time in this area.

Retail Trade Sales Workers

What they do.--The duties, skills and responsibilities of the sales workers depend on the type of merchandise they sell. The sales worker must create an interest in the merchandise. The sales worker may need to answer questions about how an article is made and perhaps demonstrate its use. Sales workers must also make out sales slips, receive cash, make change and give receipts. They

para casas. Mucha gente busca otras clases de trabajo después de tratar de vender bienes raíces. Así es que hay que reponer a los que dejan sus trabajos. No hay mucha gente trabajando medio tiempo en los bienes raíces.

Los vendedores de por menor

Lo que hacen.--Las responsabilidades y las habilidades de los vendedores dependen del tipo de mercancía que venden. El vendedor debe crear un interés en la mercancía. El vendedor puede contestar a las preguntas de cómo se hace un artículo o tal vez demostrar su aplicación. Los vendedores deben escribir recibos, recibir dinero, y dar cambio. También manejan
also handle returns and exchanges of merchandise. In some stores they may straighten stock, arrange displays, and help with ordering.

Where they work.--
They work in large and small stores as well as door-to-door sales and mail order houses. The largest employers of retail workers are department, apparel, accessories, and food stores.

Training.--Retail selling is one of the few areas where students may advance to executive jobs no matter what their professional background. A high school education is preferred. The Distributive Education work programs cater to high school students.

Donde trabajan.--
Trabajan en los almacenes y tiendas. También venden de casa en casa y en las fábricas donde ordenan por correo. Los almacenes grandes, las tiendas de ropa, de accesorios y de comida ocupan a la mayoría de vendedores.

El entrenamiento.--
El vender por menor es una de las áreas donde los estudiantes pueden avanzar a posiciones ejecutivas, no importa cual sea la educación profesional. Una educación de la escuela secundaria es preferida.
students who are interested in sales jobs. There is a cooperative arrangement between the school and business community in this program. Applicants for jobs should appear at the personnel offices of large department stores. They may be interviewed and given an aptitude test. They should be willing to stand for long periods of time and have a pleasant personality.

In small stores training is on-the-job while in large stores there may be a specialized program. Beginners start in notions or hardware where the customer doesn't need much assistance. The most experienced and highly paid workers in the store sell the more expensive items. Advancement might lead to jobs as sales managers, department store managers or buyers.

El programa de educación distributiva tiene programas de trabajo para los estudiantes que tienen interés en empleos de venta. Hay un arreglo cooperativo entre la escuela y la comunidad de negocios en este programa. Los solicitantes para empleos deben aparecer a las oficinas del personal de los almacenes. Pueden entrevistarse y darles un examen de aptitud. Deben estar de pie por mucho tiempo y tener una personalidad amable. En las tiendas el entrenamiento es en el empleo, mientras que en los almacenes puede ser un programa especializado. Los principiantes comienzan en ferretería donde el cliente no necesita mucha ayuda. Los artículos más caros son
Earnings.—The starting wage is generally at minimum. In addition to their salary some workers receive commissions. Earnings were highest for those involved in technical sales or those that required special skills in dealing with the customers. In many retail stores they can purchase merchandise at a discount. Employee benefits are often paid by the large stores. Because Saturday is a busy day in retailing, sales workers usually work Saturday and have a weekday off. Some vendidos por los trabajadores con más experiencia y los trabajadores de los mayores sueldos. Los empleados pueden avanzar a gerentes de venta o del departamento o como compradores.

El sueldo.—Los empleados reciben generalmente el sueldo mínimo. Además, reciben comisión. Los que trabajan en ventas técnicas y los que requieren ciertas habilidades reciben mejores sueldos. En muchas tiendas pueden comprar mercancía con descuentos. Los beneficios de los empleados son pagados muchas veces por los almacenes. Porque el sábado es un día muy ocupado en las tiendas, los vendedores o dependientes trabajan estos días y tienen un día de la semana
overtime is generally expected, especially by those who work for stores in large suburban shopping centers.

The future.--There are good prospects for jobs in the future; though as self-service is extended in many stores, the need for sales personnel will decrease. Rising costs of big products will mean more time to be spent with the customers.

Reservation, Ticket and Passenger agents

What they do.--Contact with the public is provided by these agents. They reserve seats, sell tickets and help passengers board planes. Information about fares and schedules is given by phone by reservation agents.

El futuro.--Hay buenos prospectos para empleos en el futuro; aunque como el autoservicio es extendido en muchas tiendas, no hay tanta necesidad para tantos dependientes. Los costos de productos que-rrán decir que más tiempo se gastará con los clientes.

Los agentes de reservaciones

Lo que hacen.--Los a-gentes de reservaciones tienen mucho contacto con el público. Reservan asien-tos, venden boletos y ayu-dan a los pasajeros abordar a los aviones. La informa-ción de los precios y los
They learn to use a computer which keeps track of available seating. They also fill out ticket forms with flight number, name and destination as well as tag luggage for the flight.

Passenger agents assist ticket agents as well as use the public address system to tell passengers when and where to board flights. They also collect tickets at the gates and assign seats. Customers are assisted in locating lost or damaged articles by passenger agents. Reservation agents work in large airports.

**Qualifications.**—A good speaking voice is very important. High school

horarios se dan por teléfono por los agentes de reservaciones. Aprenden a usar la computadora que cuenta los asientos vacantes. También escriben boletos con el número del vuelo, el nombre y el destino y ponen la etiqueta en el equipaje.

Los agentes de pasajeros asisten a los agentes de boletos y anuncian a los pasajeros cuando y donde abordan a los aviones. también recogen boletos a las entradas, asignan los asientos y ayudan a los pasajeros a encontrar los artículos que han perdido. Los agentes de reservaciones trabajan en los aeropuertos grandes.

**Las calificaciones.**—Una buena voz es muy importante. La graduación de
graduation is required with some college. A new employee receives about one week of classroom instruction, and then he has on-the-job training. After about three weeks the job can usually be handled without close supervision. Advancement is slow. Reservation and ticket agents may be promoted to passenger agents. Passenger agents may advance to supervisors.

The future.--Because airline jobs are attractive to many people, there will be much competition for these jobs. Though machines are being installed to handle reservations, records and routine tasks, the personal touch that is part of the airline agent's job will not be replaced.

El futuro.--Porque los empleos en las aerolíneas son atractivos para mucha gente, habrá mucha competencia para esos empleos. Aunque hay máquinas instaladas para las reservaciones y las tareas de rutina, el toque personal que es parte del empleo del agente es más importante.
Education and Related Occupations

Interest Questions

1. Do you enjoy helping people?
2. Do you enjoy talking to people?
3. Do you enjoy showing someone how to do something new?
4. Are you creative?
5. Are you patient?
6. Is a moderate salary acceptable to you?
7. Does job satisfaction mean more than money to you?
8. Do you enjoy working indoors?
9. Do you like children?
10. Are you flexible?

Preguntas de interés

1. ¿Le gusta a Ud. ayudar a la gente?
2. ¿Le gusta a Ud. hablar con la gente?
3. ¿Le gusta a Ud. mostrar a una persona como hacer algo nuevo?
4. ¿Es Ud. creativo?
5. ¿Es Ud. paciente?
6. ¿Puede Ud. aceptar un salario moderado?
7. ¿Cuál le interesa más, la satisfacción con el empleo o el dinero?
8. ¿Le gusta a Ud. trabajar adentro?
9. ¿Le gustan a Ud. los niños?
10. ¿Es Ud. flexible?

Vocabulary

1. kindergarten
2. teacher
3. physical health

Vocabulario

1. parvulos
2. el maestro, el profesor
3. la salud física
Education and Related Occupations

Introduction

This section is presenting kindergarten teachers, librarians, teacher aides and psychologists, and rehabilitation counselors. They are all representative of

La introducción

En esta sección se presentan los maestros de párulos, los bibliotecarios, los ayudantes de los profesores y los psicólogos. Todos son representativos de
education and related occupations. These people play vital roles in the education of all people.

Kindergarten and Elementary School Teachers

What they do.--They introduce children to the basic ideas of language, math, and social studies and science. They try to instill good study habits, good work habits and an appreciation for learning are also their goals.

The teachers are also concerned with the physical and social development of their students. They hold parent conferences to consult and work out solutions to problems with the parents. The students are instructed in the basic subjects by one teacher. In larger school systems music, art and physical education are taught.

la educación y las ocupaciones relativas. Estas personas juegan papeles importantes en la educación de toda la gente.

Los maestros de la escuela elementaria y parvulos

Lo que hacen.--Introducen a los niños las ideas básicas del lenguaje, las matemáticas, las ciencias sociales y la ciencia. Ellos tratan de enseñar hábitos de buen estudio, hábitos de buen trabajo, y una apreciación por el conocimiento también.

Los profesores también se interesan con la salud física y el desarrollo de sus estudiantes. Tienen reuniones con los padres para consultar y resolver problemas. Los estudiantes estudian las materias fundamentales.
by specialized teachers. Teachers attend workshops, conferences and meetings. Some have teacher aides to help them with their paperwork.

Where they work.--They work in public and private school systems. Urban areas employ the greatest amounts of kindergarten and elementary school teachers.

Training.--All teachers must be certified by the department of education of the state where they work. To qualify for certification a teacher must earn a bachelor's degree. Teachers need creativity, dependability, patience, the desire

con un maestro. En los sistemas más grandes, la música, el arte, y la educación física las enseñan los maestros especializados. Los maestros asisten a seminarios, conferencias y reuniones. Algunos tienen ayudantes para ayudarles con su trabajo.

Donde trabajan.--Trabajan en las escuelas públicas y privadas. Las áreas urbanas emplean la mayoría.

El entrenamiento.--Todos los maestros deben estar certificados por el departamento de educación del estado donde trabajan. Para recibir esta certificación un maestro necesita el bachillerato en la filosofía y letras o en ciencia,
to work closely with children, and the competency to handle classroom discipline. Advancement usually means higher pay, because other positions in the educational system require additional training.

Earnings.--The National Education Association published $11,870 as the average income for public school teachers in 1976. States in the northwest and the west paid the highest salaries. Public elementary school teachers work an average of forty-six hours per week.
The future. -- There will be competition for jobs in the 1980's. Pupil enrollment determines the need for elementary school teachers. Due to declining birth rates, pupil enrollment is lower than in the past.

Librarians

What they do. -- Librarians select, organize, make accessible and assist in the use of all information to be available to the public. In small libraries one person may do all of these activities. In larger libraries the activities might be more specialized. For example, a librarian might


Los bibliotecarios

Lo que hacen. -- Los bibliotecarios escogen, organizan, hacen accesible y ayudan en el uso de la información disponible al público. En las bibliotecas pequeñas una persona puede hacer todas estas actividades. En las bibliotecas más grandes las
work only with children or only with young adults. Some might work in extension or outreach mobiles. Librarians work in public schools, public libraries, universities, and special libraries in prisons, hospital and government agencies.

**Training.**—A master's degree in library science is necessary to be a librarian. A doctorate is desirable for specialized library work. Graduate schools of library science require reading knowledge of at least one foreign language, a bachelor's degree from an accredited university with good grades. They usually

**El entrenamiento.**—Un licenciado en la biblioteconomía es necesario para ser bibliotecario. Un doctorado es deseable para trabajo especializado en la biblioteca. Las escuelas graduadas de ciencia bibliotecaria requieren un conocimiento de leer al menos una lengua extranjera,
specialize in the subject in which they plan to work. A student wishing to become a media specialist would take courses in audio-visual material.

**Earnings.**—Salaries depend on the type of library the individual's qualifications, the size and geographic location of the library. The average entering salary for a librarian is $15,000. The salaries are highest in the federal government. Librarians have a forty hour work week with paid vacations and most benefits and pension plans.

un licenciado bachillerato de una universidad acreditada con buenas notas. Generalmente se especializan en el curso en que planean trabajar. Un estudiante que quiere hacerse especialista de media tomará clases en materias audi-visuals.

**El sueldo.**—Los salarios dependen del tipo de biblioteca, las calificaciones de los individuos, el tamaño y la posición geográfica de la biblioteca. El salario promedio para una bibliotecaria principiante es $15,000. Los salarios son más altos en el gobierno federal. Los bibliotecarios tienen una semana de cuarenta horas con vacaciones pagadas, muchos beneficios y una pensión.
The future.--The employment outlook is competitive during the 1980's. More jobs are expected to be found in the public libraries. There will also be more jobs in the central United States.

Teachers Aides

Teacher aides support teachers directly in teaching students and in non-teaching activities. In some localities aides work directly with the children. They may do routine work such as grading tests, checking homework or keeping health and attendance records. Secretarial duties such as typing and duplicating may also be a part of the job. Operating audio-visual equipment, supervising students during lunch and


Los ayudantes de escuela

Los ayudantes de escuela trabajan directamente con los estudiantes y en las actividades de la escuela. En algunos sitios los ayudantes trabajan directamente con los niños. Pueden hacer trabajo de rutina como marcar los exámenes, calificar las tareas, anotar las asistencias de salud y de asistencia. La mecanografía, la duplicación, operar el equipo audiovisual, supervisar a los estudiantes durante el
recreation periods and helping keep classroom order may be other responsibilities.

Training.--Requirements vary from a high school diploma to two years college training. The more classroom responsibility an aide has, the more training is usually required. A growing number of junior colleges offer teacher aide programs. Advancement comes with experience.

Earnings and the future.--
Earnings are at minimum wage. The aides are covered with the same employee benefits that teachers receive. Jobs for teacher aides are expected to increase. The number of actual job openings will depend on the districts and their respective budgets.

almuerzo y los períodos de recreación y ayudar a guardar el orden en la sala de clase pueden ser otras responsabilidades.

El entrenamiento.--
Los requisitos varían de un diploma de la escuela secundaria a dos años de colegio. Las más responsabilidades que un ayudante tiene, el más entrenamiento que se requiere. Un gran número de colegios ofrecen programas de ayudante de los maestros.

El sueldo y el futuro.--
El sueldo es el mínimo. Los ayudantes tienen los mismos beneficios que los maestros. Los empleos para ayudantes se espera que aumente. El número de empleos dependerá en los distritos y sus presupuestos respectivos.
Psychologists

What they do.—Psychologists study the behavior of people to try to determine why they behave as they do. There are at least ten specialties in psychology such as school psychologists who diagnose educational problems and facilitate school adjustment and industrial psychologists who conduct personnel research, policy and planning. The majority are engaged in clinical psychology, helping mentally disturbed patients adjust to life and testing in order to design effective behavioral modification programs.

Los psicólogos

Lo que hacen.—Los psicólogos estudian la conducta de la gente para tratar de determinar por qué se comportan como lo hacen. Hay al menos diez especialidades en psicología como los psicólogos de escuela que diagnostican los problemas educacionales y facilitan en el ajustamiento en la escuela y los psicólogos industriales que conducen la investigación, las pólizas y los planes de personal. La mayoría practican la psicología clínica ayudando a los enfermos mentales ajustarse a la vida y examinando para desarrollar programas efectivos para modificar la conducta.
Where they work.--Approximately one-half of the psychologists worked in educational institutions. The next largest group worked for government agencies, hospitals, clinics, rehabilitation institutions, government agencies, and businesses. Some are in independent practice or serve as consultants.

Training.--A doctoral degree is almost always required for employment as a psychologist. Those with a masters degree may qualify as psychological assistants or school psychologists. Those with a bachelor's degree in psychology may work as assistants in

Donde trabajan.--Aproximadamente la mitad de los psicólogos trabajan en instituciones mentales. El próximo grupo más grande trabaja para las agencias del gobierno en los hospitales, las clínicas y los centros de rehabilitación. Son también empleados en instituciones correccionales, las agencias del gobierno, y los negocios. Algunos están en práctica independiente o sirven como consejeros.

El entrenamiento.--Casi siempre se requiere un doctorado para el empleo como psicólogo. Esos con licenciatura de "master" pueden calificar como ayudantes de psicólogo o psicólogos de la escuela. Esos con un licenciado en psicología pueden trabajan como
mental health centers, vocational rehabilitation offices and correctional programs or as trainees in government or business. Emotional stability, the ability to deal with people, sensitivity and patience are important attributes of a psychologist.

Earnings.--The median starting salary for a beginning psychologist is approximately $12,000 according to the American Psychological Association. A doctoral psychologist earns at least $10,000 per year more than one with a masters. Working hours are flexible, but evening work is often required with families and groups.

El sueldo.--El salario promedio principiante para un psicólogo es aproximadamente $12,000 según la Asociación de Psicólogos Americanos. Un psicólogo con doctorado gana al menos $10,000 por año más que uno con un "masters". Las horas de trabajo son flexibles, pero el trabajo de la noche se requiere a menudo con las familias y los grupos.
The future.—There will be a strong demand for psychologists. There is increased public concern for the development of human resources among minorities. Preventive medicine may increase needs for psychologists. Those holding doctoral degrees from prestigious universities should have an advantage in the job market. The applied psychology areas such as clinical and industrial should have an advantage over the traditional areas such as experimental and comparative.

Rehabilitation Counselors

The rehabilitation counselor is one who helps disabled persons to leave a sheltered environment and lead a normal life. They study a client's case history, explore training

El futuro.—Habrá una gran demanda para los psicólogos. Hay interés para el desarrollo de los recursos humanos entre la minoría. La medicina preventiva puede aumentar la necesidad para los psicólogos. Esos que tienen doctorados de las universidades de buena reputación deben tener una ventaja en el empleo. La psicología aplicada como clínica e industrial debe tener una ventaja sobre las áreas tradicionales como experimentales y comparativas.

Los consejeros de rehabilitación

El consejero de rehabilitación es el que ayuda a las personas incapacitadas a salir de un ambiente protegido y vivir normalmente. Estudian la historia
and career options, and thus develop a rehabilitation plan. Job placement is an important part of the work. Some specialize in certain types of handicaps.

Where they work.--Rehabilitation agencies funded by state and federal monies employ a large percentage of the rehabilitation counselors. Others are found in hospitals, insurance companies, labor unions and special schools.

Training.--Most employers want a master's degree in vocational or rehabilitation counseling. Counselors must pass state examination. The ability to accept responsibility, to be able to work

de un caso de un cliente, exploran alternativas de carreras y desarrollan un plan de rehabilitación. El empleo es parte importante del trabajo. Algunos especializan en ciertos tipos de desabilidades.

Donde trabajan.--Las agencias de rehabilitación consolidadas por dinero federal y del estado emplean un porcentaje grande de los consejeros de rehabilitación. Otros se encuentran en hospitales, compañías de seguro, los sindicatos y escuelas especiales.

El entrenamiento.--La mayoría de los empleados quieren una licenciatura en el consejo de rehabilitación o de vocaciones. Los consejeros deben pasar exámenes del estado. La
independently, and motivate and guide the activity of others, much emotional stability and patience are important attributes.

Earnings.--Salaries averaged about $12,000 for a beginner with a master's degree. Counselors may spend part of their time working with prospective employers, training centers and the clients' family. They work a forty hour week and are covered by sick leave, health and pension plans.

The future.--How fast the openings develop will depend on the level of government spending. Many

El futuro.--Las posiciones en estos trabajos dependen en los gastos del gobierno. Muchas
private companies hire rehabilitation counselors.

agencias privadas ocupan consejeros de rehabilitación.

Scientific and Technical Occupations

<table>
<thead>
<tr>
<th>Interest Questions</th>
<th>Preguntas de interés</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Are you curious?</td>
<td>1. ¿Es Ud. de mucha curiosidad?</td>
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<tr>
<td>2. Do you enjoy detail work?</td>
<td>2. ¿Le gusta el trabajo de detalle?</td>
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<tr>
<td>3. Are you accurate?</td>
<td>3. ¿Es preciso en su trabajo?</td>
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<tr>
<td>4. Do you enjoy fixing things?</td>
<td>4. ¿Le gusta reparar las cosas?</td>
</tr>
<tr>
<td>5. Do you enjoy making things?</td>
<td>5. ¿Le gusta fabricar objetos?</td>
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<tr>
<td>6. Do you have manual dexterity?</td>
<td>6. ¿Tiene Ud. destreza manual?</td>
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<tr>
<td>7. Do you have good vision?</td>
<td>7. ¿Tiene buena vista?</td>
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<tr>
<td>8. Do you enjoy working outdoors?</td>
<td>8. ¿Le gusta trabajar al aire libre?</td>
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<tr>
<td>9. Do you have good spatial perception?</td>
<td>9. ¿Tiene buena percepción espacial?</td>
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<tr>
<td>10. Do you enjoy traveling?</td>
<td>10. ¿Le gusta viajar?</td>
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Introduction

As industry continues to assume more importance in contemporary society, scientific and technical occupations are becoming more and more in demand by employers. This section will discuss the occupations of drafters, surveyor, petroleum engineer, soil conservationist and biochemist.

Vocabulary

1. the drawing
2. the cost
3. the device
4. the level
5. the task
6. often
7. useful
8. the size
9. leadership
10. heavy

La introducción

Como la industria continúa a tener más importancia en la sociedad contemporánea, las ocupaciones científicas y técnicas llegan a estar más en demanda para los jefes de empleos. Esta sección discutirá las ocupaciones del dibujante, agrimensor, ingeniero de petróleo, conservacionista de la tierra y bioquímica.

El vocabulario

1. el dibujo
2. el costo
3. el aparato
4. el nivel
5. la tarea
6. a menudo
7. útil
8. el tamaño
9. el mando
10. pesado
Drafters

What they do.—They prepare detailed drawings based on rough sketches made by scientists, engineers, and architects. They also figure the cost, strength, quality and quantity of materials. To prepare drawings they use protractors, compasses, triangles and other devices. They are classified according to the work they do and their level of responsibility. They might specialize in a

11. the hearing
12. the oil
13. to express oneself
14. the method
15. the damage
16. to prevent
17. to snow
18. to comply
19. the wood
20. to report

Drafters

11. el oficio
12. el aceite
13. expresarse
14. el método
15. el daño
16. prevenir
17. la nieve
18. acceder
19. la madera
20. relatar

Los dibujantes

Lo que hacen.—Preparan dibujos detallados basados en apuntes hechos por los científicos, los ingenieros, y los arquitectos. También figuran el costo, la fuerza, la calidad y la cantidad de materiales. Para preparar los dibujos usan los transportadores, los círculos, los triángulos y otros aparatos. Se clasifican según el trabajo que hacen y su nivel
particular field such as mechanical, structural or architectural.

Where they work.--They work for private industry, engineering, architectural, fabricated metals, electrical equipment, machinery, and construction. The government also employs drafters in defense, highway and public works departments. Others work for universities and other nonprofit organizations.

Training.--Technical institutes, junior and community colleges, vocational high schools, Armed Forces training, on-the-job training combined with part-time schooling and apprenticeship.
programs are all ways to become a drafter. A potential drafter should be able to do freehand drawing of three-dimensional objects. One should be highly accurate in his work, have good eyesight and manual dexterity. To function as part of a team is very important.

**Earnings.**—Salaries vary from $8,000 to $15,000 per year. Though they work in nice surroundings, they must sit for long periods of time doing detailed work.

**The future.**—Job opportunities will be favorable throughout the 1980's. Those with a two year associate degree in drafting will have the best prospects. Because modern products are becoming

**El sueldo.**—Los salarios varían desde $8,000 a $15,000 por año. Aunque trabajan en buenos ambientes, deben estar sentados por largos períodos de tiempo haciendo tareas detalladas.

**El futuro.**—Las oportunidades serán favorables en la década de los 1980. Esos con un diploma de dos años en el dibujo tendrán los mejores prospectos, porque los productos
increasingly complex, more engineers, scientists, will be hired.

Surveyors

Training.--Junior college and vocational schools offer training programs in surveying. Some four year colleges offer bachelor's degrees in surveying. Classes in algebra, geometry, trigonometry, drafting, and mechanical drawing are helpful. High school graduates usually start with simple tasks and advance when they have the skill. All land surveyors must be registered by the state because they can be held legally responsible for their work. At least three to eight years experience in surveying is necessary to become a registered surveyor. Surveyors need good spatial perception to be able to modernos llegan a ser más complejos y se necesitarán más ingenieros, científicos, y dibujantes.

Los agrimensores

El entrenamiento.--Los colegios y las escuelas vocacionales ofrecen el entrenamiento en agrimensor. Algunos colegios de cuatro años ofrecen un licenciado en agrimensor. Las clases en algebra, geometría, trigonometría, dibujante y el dibujo mecánico son útiles. Los graduados de la escuela comienzan con las tareas más sencillas y avanzan cuando tienen la habilidad. Todos los agrimensores deben estar registrados por el estado porque serán legalmente responsables por su trabajo. Al menos tres a
visualize objects, distances, sized and other abstract forms. They must be able to do math quickly and accurately. Leadership qualities are also necessary.

Earnings and the future.--
Starting salaries range from $6,500 to $8,500 per year. Some high level positions earn $20,000 per year. They must walk long distances and carry heavy equipment. So, they need to be physically fit. Good coordination, eyesight and hearing are needed to communicate over.

El sueldo y el futuro.--
Los sueldos principiantes varían de $6,500 a $8,500 por año. Algunas posiciones avanzadas ganan más de $20,000 por año. Deben caminar largas distancias y llevan equipo pesado. Necesitan estar en buena salud física, tener buena coordinación, buena vista...
long distances by hand signals and voice calls.

Increased development of land areas will create jobs for surveying streets, shopping centers, housing developments and recreation areas.

**Petroleum Engineers**

*What they do.*—They develop the most efficient production methods of recovering oil and gas from a reservoir. Some petroleum engineers work in research and production efforts to increase the proportion of oil recovered from each reservoir.

*Where they work.*—They are employed by major oil companies, independent oil companies, and government agencies.

**Los ingenieros de petróleo**

*Lo que hacen.*—Desarrollan los métodos de producción más eficientes para reestablecer el aceite y el gas de una represa. Algunos ingenieros de petróleo trabajan en investigaciones y producción para aumentar la proporción de aceite reestablecido de cada represa.

*Donde trabajan.*—Son empleados por las compañías mayores de aceite, las
and production companies, companies that produce drilling equipment, banks and financial institutions, engineering consulting firms or the Federal and State Government. The oil states of Texas, Oklahoma, California, and Louisiana employ most engineers. Many work abroad in oil-producing countries.

Training.--An engineer requires at least a bachelor's degree. Many universities have five year engineering programs. To be a licensed engineer, a bachelor's degree, four years relevant work experience are needed.

Earnings.--Starting salaries vary. A beginning engineer with a bachelor's

El entrenamiento.--Un ingeniero requiere al menos un licenciado. Muchas universidades tienen programas de ingeniería de cinco años. Para ser ingeniero licenciado, se necesitan cuatro años de experiencia de trabajo y pasar un examen del estado.

Sueldo.--Los salarios principiantes varían. Un ingeniero con licenciado
degree will start at approximately $16,000. Those with a doctorate will start at over $20,000.

The future.—The need for petroleum engineers will increase during the 1980’s. Higher gasoline prices are going to call for increasingly sophisticated recovery methods. New sources of oil such as oil shale and new offshore sources may be developed.

Soil Conservationists

What they do.—They help farmers, ranchers, and land managers make the most productive use of the land without damaging it. They do most of

empezará con aproximadamente $16,000. Esos con el doctorado empezarán con $20,000.

El futuro.—La necesidad para los ingenieros de petróleo crecerá durante la década de los 1980. A causa de los precios altos de la gasolina se requerirán más métodos sofisticados de recuperar el aceite. Nuevos orígenes del aceite como el aceite de esquisto bituminoso y nuevos orígenes del aceite de la costa se pueden desarrollar.

Los conservacionistas de la tierra

Lo que hacen.—Ayudan a los rancheros, a los agricultores, y a los gerentes de terrenos a usar la tierra más productivamente sin
their work out of the office, visiting the farmers and ranchers. They inspect land with insufficient rainfall and recommend how ranchers can build ponds to create grazing land. They try to prevent conservation problems before they arise by visiting the mountains to measure the snow to advice the farmers of what kind of spring they will have.

**Where they work.**—The Department of Agriculture's Soil Conservation Service and the Department of the Interior's Bureau of Indian Affairs employ many soil conservationists. Rural banks, insurance firms, mortgage companies make use of their services to ensure the conservation of land.

**Donde trabajan.**—El Departamento de Agricultura tiene un servicio de conservación de la tierra y el departamento del interior tiene una oficina de los asuntos de los indios. Estos departamentos
that make loans for agricultural lands, public utilities, and lumber and paper companies that have large holdings of forest lands employ soil conservationists.

Training.--A background in agricultural engineering and mapmaking is helpful. Most soil conservationists have degrees in science or agriculture. Opportunities for advancement are slim though one can advance from local to state levels of government agencies or perhaps teach in an agricultural college.
Earnings and the future.--
Salaries range from $10,000 beginning to $30,000 for soil conservationists. Banks, utilities and organizations that make loans on agricultural lands are adding conservationists to their staffs to help preserve the value of farmlands or help land owners comply with recent conservation and antipollution laws. More colleges will add soil conservation departments which will increase the need for professors. New graduates with a bachelor's degree generally start work as a research assistant or technician.

Biochemists
Biochemists study the chemical composition and behavior of living things.

El sueldo y el futuro.--
Los salarios varían desde $10,000 hasta $30,000 con muchos años de experiencia. Los bancos, las empresas de servicio público que hacen préstamos para tierras agrícolas ocupan a los conservacionistas para preservar el valor de las tierras o para ayudar a los dueños cumplir con las leyes de anti-polución y conservación. Más colegios añadirán departamentos de estudio de la tierra y aumentarán el número de profesores. Nuevos graduados con un licenciado generalmente empiezan trabajando como ayudantes de investigación o técnicos.

Los bioquímicos
Los bioquímicos estudian la composición y la conducta de las cosas con
They also study the effects of foods, hormones, and drugs on various organisms. In labs they weigh, filter, distil, dry and culture organisms. They report the results of their research in scientific journals or before scientific groups.

Where they work.--Colleges, universities, private industry drug, insecticide and cosmetic manufacturers, non-profit research institutes and Federal, State, and local government agencies employ biochemists. A few are self-employed as consultants to industry and government.

Donde trabajan.--Los bioquímicos trabajan en los colegios, las universidades, la industria privada, los fabricantes de medicinas, la insecticidas y de cosméticos, los institutos de investigación o en las agencias del gobierno. Algunos trabajan como consultores privados y con el gobierno.
Training.--A doctoral degree is necessary for anyone hoping to contribute to research. A bachelor's degree is necessary to even begin to enter the profession.

Earnings and the future.--The range of salary is between $20,000 and $30,000 depending on the degree and the experience. Though they do much work in a laboratory, they may write, lecture or do library research. Jobs will increase due to increased government funding for research. Cures for diseases and environmental protection are prime targets.

El entrenamiento.--Un doctorado es necesario para una persona que desea contribuir a la investigación. Un licenciado es necesario para entrar en la profesión.

El sueldo y el futuro.--El salario varía entre $20,000 y $30,000 dependiendo en el licenciado y la experiencia. Aunque hacen mucho trabajo en un laboratorio, pueden escribir, hablar o hacer investigaciones en la biblioteca. Los empleos crecerán debido al aumento en el gasto del gobierno para la investigación. El mejoramiento de la salud y la protección del ambiente son los primeros objetos.
Social Services Occupations

**Interest Questions**

1. Would you enjoy being closely involved in the lives of the people you work with?
2. Would you enjoy helping people improve their lives?
3. Do you mind being around people who are sick?
4. Do you enjoy working as part of a team?
5. Are you considered dependable?
6. Are you considered to have good judgement?
7. Would you enjoy being a leader?
8. Do you speak a second language?
9. Do you have typing skills?
10. Does an irregular work schedule seem interesting to you?

**Preguntas de interés**

1. ¿Le gustaría interesarse en las vidas de la gente con quien trabaja?
2. ¿Le gusta ayudar a la gente a mejorar sus vidas?
3. ¿Le molesta estar con las personas que están enfermas?
4. ¿Le gusta trabajar como parte de un grupo?
5. ¿Pueden depender de Ud.?
6. ¿Tiene Ud. buen juicio?
7. ¿Le gusta ser jefe?
8. ¿Habla una lengua extranjera?
9. ¿Escribe a máquina?
10. ¿Está interesado en un horario irregular para trabajar?
<table>
<thead>
<tr>
<th>Vocabulary</th>
<th>El vocabulario</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. the development</td>
<td>1. el desarrollo</td>
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<td>2. the average</td>
<td>2. el promedio</td>
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<td>3. part-time</td>
<td>3. por media jornada</td>
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<td>4. the budget</td>
<td>4. el presupuesto</td>
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<td>5. the judgement</td>
<td>5. el juicio</td>
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<td>6. to act</td>
<td>6. tomar acción</td>
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<td>7. the threat</td>
<td>7. la amenaza</td>
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<td>8. el apoyo</td>
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<td>9. maduro</td>
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</tr>
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<tr>
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<td>15. los planes diarios</td>
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<td>20. housing</td>
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**Introduction**

People in social service occupations become closely involved in their clients'

**La introducción**

La gente en los servicios sociales llegan a ser interesados en las vidas de
A genuine concern for people and a sincere desire to help them improve their lives is necessary for anyone considering work in social services. School counselors, correction officers, home health workers, recreation workers, and social service aides will be discussed as representative of social services occupations.

School Counselors

What they do.—They give individual attention to students' career, educational, and social development. They help students understand themselves. They

Los consejeros de la escuela

Lo que hacen.—Dan atención individual al desarrollo vocacional, educacional y social de los estudiantes. Ayudan a los estudiantes entenderse.
administer specialized tests, evaluate career choices, have responsibility for the school's career education programs. They keep current on new training programs, educational opportunities, and career updates. They work on job placement for students, graduates, and dropouts. They may work closely with liaison persons in the community. Some teach classes in occupational information, and work with school clubs and activities.

Where they work.—They work in public and private schools on secondary and elementary levels. Small schools receive guidance.

Where they work.—They work in public and private schools on secondary and elementary levels. Small schools receive guidance.
services when more than one counselor is assigned to a school.

**Training.**—Most states require counselors to have counseling and teaching experience. According to the state, a Master's degree in counseling plus one to five years teaching experience is necessary to receive a counseling certificate. School counselors generally earn more than teachers at the same school. They help students to accept responsibility for their own lives. They must be able to coordinate activities as part of a team.

**Salary.**—School counselors generally earn more than teachers at the same school.
school. The average salary of a school counselor is approximately $18,000. The school counselor works more days than the teacher. They receive regular salary increments, as they gain experience. Sometimes they do private counseling as part-time work.

The future.--Due to declining enrollments and budgets, employment will grow slowly. Special Federal programs for career education should result in more jobs.

Correction Officers

Correction officers maintain order in prisons, counsel inmates and supervise all correctional institutions.

Correction Officers

Correction officers maintain order in prisons, counsel inmates and supervise all correctional institutions.

El futuro.--El empleo crecerá lentamente debido a que menos estudiantes se registrarán durante los años. Los programas federales para la educación para programas de carrera deben resultar en más empleos.

Los oficiales del reformatorio

Los oficiales del reformatorio mantienen orden en las cárceles, aconsejan a los presos y supervisan...
activities. They admit visitors, censor mail, administer first aid, assist police in investigating crimes committed within the jail. Correction officers also help with rehabilitation inmates about to be released. They work for state and local governments in institutions located outside of large metropolitan areas.

Training.--The federal government and some states provide training for correction officers. Correction officers should be twenty one with a high school education. Strength, good judgement, and the ability to think and act quickly are assets. Some states
require candidates to pass a written examination.

Earnings and the future.--
The average salary is approximately $12,000 per year. Prison security is provided constantly so officers might be asked to work night shifts and holidays and weekends. They may be found indoors, on towers, or at gates. Though the work is not considered dangerous, there is always threat of trouble by inmates. Population increase within jails should create growth in job opportunities for correction officers.

y tomar medidas rápidamente son ventajas. Algunos estados requieren que los candidatos pasen un examen escrito.

El salario y el futuro.--
El salario promedio es aproximadamente $12,000 por año. La seguridad en la prisión es asegurada constantemente y por esta razón los oficiales tienen que trabajar por la noche, durante las vacaciones y los fines de semana. Pueden encontrarse dentro las torres y las verjas. Aunque el trabajo no se considera peligroso, hay siempre amenaza de peligro por los prisioneros. El aumento de la población en las cárceles debe crear más oportunidades de empleo para los oficiales de corrección.
Home Health Aides

Where they work.—Public health and welfare departments, private health care agencies and community agencies employ home-health aides. The aide may be a part of a team of nurses, therapists, and others who have the same supervisor. They probably serve the same patients in a particular area.

Training.—The ability to read and write is necessary. Some agencies require experience as a nursing aide in a hospital or nursing home. They need to be mature, cheerful, tactful and physically strong. Most agencies provide a training program.
In some agencies they might specialize in caring for patients with a specific type of problem.

Earnings.--Aides generally work for a minimum wage. A typical full-time aide works forty hours per week with regular benefits. There is part-time work available. Also the independence involved in carrying out daily plans is preferred by many.

The future.--There will be many openings in this area. Growing public awareness of the availability of these físicamente fuertes. La mayoría de las agencias proveen un programa de entrenamiento. En algunas agencias pueden especializarse en cuidar pacientes con un tipo específico de problema.

El sueldo.--Los ayudantes generalmente trabajan por salario mínimo. Un ayudante típico trabaja cuarenta horas por semana con beneficios regulares. Hay trabajo de media jornada disponible que es una ventaja atractiva. También muchos prefieren las oportunidades de hacer planes diarios en este trabajo.

El futuro.--Habrá muchos empleos en esta área. La conciencia pública y reciente de la disponibilidad
Services, government legislation authorizing that more public funds be channeled into this area will further increase jobs for aides.

Recreation Workers

What they do.--They provide leadership, give instruction in sports, crafts, and activities. Program specialists are trained in planning, implementation and management of program development.

Where they work.--This area has a very large number of seasonal, part-time, and volunteer jobs. City, county and state and federal government employ most recreation workers. Senior centers,
retirement communities, hospitals, prisons, retirement homes all provide jobs for the recreation worker.

Training.--For those seeking full-time positions in recreation a four year college degree is required. Junior Colleges do have programs in recreational activities. Recreational workers should be capable of motivating people. Good health, physical stamina, good judgement, willingness to accept responsibility and the ability to work alone are all important.

Earnings.--Starting salaries for those with a bachelor's degree are

trabajadores de recreación. También los centros para los ancianos y jubilados, los hospitales y las carceles los emplean.

El entrenamiento.--Para los que buscan posiciones en recreación, se requiere un licenciado de la universidad. Los colegios de dos años tienen programas en actividades de recreación. Los trabajadores de recreación deben motivar a la gente. Buena salud, la energía física, buen juicio, la voluntad de aceptar responsabilidades y la habilidad de trabajar solo son importantes.

El sueldo.--Los salarios de los especialistas varían de $10,000 a sobre
approximately $10,000. Specialists' salaries range over $20,000. There is night work and many hours are spent out-of-doors.

Social Service Aides

They supplement the work of professional social workers and rehabilitation counselors. They perform routine paperwork required in welfare programs. They interview applicants to see if they are eligible for help. They help clients in family crisis, help clients obtain medical or legal aid. They help prepare disadvantaged clients for employment. They locate unemployed residents and conduct them to job training centers. They work for public welfare departments, community centers, halfway houses, rehabilitation agencies hospitals and public

$20,000. Hay trabajo por la noche y muchas horas se pasan fuera al aire libre.

Los ayudantes de servicio social

Suplementan el trabajo de los trabajadores sociales profesionales y los consejeros de rehabilitación. Hacen el papeleo de rutina que se requiere en los programas de asistencia social. Entrevistan a los aplicantes para ver si son elegibles para ayuda. Ayudan a los clientes obtener alojamiento, cuidado médico y ayudan en crisis de familia. Ayudan a los clientes obtener empleo, localizan residentes sin empleo y los animan a entrenar para empleos. Trabajan para departamentos
housing projects.

Training.--The lower the level of education, the less responsibilities one can assume. Personal qualities are very important. A sincere desire to help others, typing skills, and a knowledge of an appropriate foreign language would be useful. Many former welfare recipients are hired as social service aides. Training can be found at community colleges, and sometimes by the hiring agency.

Earnings.--Beginning full-time aides with no

de asistencia social, centros de la comunidad, casas de medio camino, agencias de rehabilitación, hospitales y proyectos de alojamiento público.

El entrenamiento.--El que tiene menos educación recibe menos responsabilidades. Las calidades personales son muy importantes. Un deseo sincero de ayudar a otros, la habilidad de escribir a máquina y un conocimiento de una lengua extranjera, serán útiles. Muchos que reciben ayuda, son empleados como asistentes. El entrenamiento se encuentra en los colegios de la comunidad y algunas veces por una agencia de empleo.

El sueldo.--Los principiantes sin experiencia
experience generally earn about $7,000 per year. They must often visit the homes of clients. Also they must work some weekends and evenings when clients can be reached.

The future.—The country's continuing concern with the disabled and disadvantaged will create more jobs for social aides. Aides will be used for much paperwork now being done by professional personnel. Increased attention to older citizens will also create jobs for aides.

Mechanical and Repairing Occupations

Introduction

Mechanics and repairers carry out very important functions in a technological society. More and more

generalmente ganan a eso de $7,000 por año. Deben visitar a menudo las casas de clientes. También deben trabajar algunos fines de semana y noches cuando los clientes pueden ser encontrados.

El futuro.—El continuo interés del país sobre las personas con desventajas creará más empleos para los ayudantes sociales. Entrenarán a los ayudantes para llenar formularios. Los ancianos y jubilados también podrán trabajar como asistentes.

La introducción
Los mecánicos y los reparadores hacen funciones muy importantes en la sociedad tecnológica.
businesses are coming to depend on the proper functioning of their machines in order to carry out daily tasks. Business machine repairers, television and radio service technicians, computer service technicians, and appliance repairers will be discussed in this cluster.

Vocabulary

1. the appliance
2. the income
3. regular
4. the level
5. the typewriter
6. the machine
7. the manufacturer
8. the maintenance
9. the brand
10. the schedule

Más y más de los negocios vienen a depender en el funcionamiento perfecto de sus máquinas para hacer las tareas diarias. Los reparadores de las máquinas de negocio, los técnicos de servicio de televisión y de reparación, los electricistas de mantenimiento y los reparadores de aparatos eléctricos serán discutidos en esta sección.

El vocabulario

1. el aparato eléctrico
2. el salario
3. constante
4. el nivel
5. la máquina de escribir
6. la máquina
7. el fabricante
8. el mantenimiento
9. la marca
10. el horario
Business Machine Repairers

Business machine repairers maintain and repair typewriters, adding machines, cash registers, postage meters, and duplicating equipment. They make regular service visits for preventive maintenance. They make minor repairs in the offices, but more serious repairs in the shop. They generally specialize in one type of machine. If they are employed by a particular manufacturer.
or dealer, they may special-
ize in only one brand type.
The use screwdrivers, pliers, 
 wrenches, as well as meters 
to test equipment for mal-
functions in electronic 
circuits.

Where they work.--They
work for business machine 
manufacturers, dealers and 
repair shops. A few work 
for large companies that 
own enough machines to 
justify full-time repairers.

las reparaciones mas serias 
en la tienda. Generalmen-
te se especializan en un 
tipo de máquina. Si están 
empleados por un fabrican-
te particular, pueden es-
pecializarse en solo una 
marca. Usan desatornilla-
dores, alicates, llaves 
inglesas así como contado-
res para probar el equipo 
para funcionamientos de-
fectuosos en los circui-
tos electrónicos.

Donde trabajan.--Tra-
bajan para los fabricantes 
de máquinas de negocios, 
los comerciantes y las 
tiendas de reparar. Pocos 
trabajan para las grandes 
compañías que poseen bast-
tantes máquinas para jus-
tificar los reparadores 
para todo el día.
Training.—Some employers will hire high school graduates. Others want one year of training in electronics. Applicants for mechanical jobs may have to pass tests that measure mechanical aptitude, knowledge of electronics, manual dexterity and intelligence. Good hearing and good eyesight are essential. To work without interrupting office routine is important. They must be trustworthy as they are often exposed to large sums of money. They must also be able to set up schedules of maintenance, meet deadlines and make emergency repairs. Trainees receive one to three years on-the-job training seminars sponsored by business equipment manufacturers.

El entrenamiento.—Algunos empleadores contratan graduados de la escuela secundaria. Otros quieren un año de entrenamiento electrónico. Los aplicantes para empleos comerciales pueden tener que pasar los examenes que miden la aptitud mecánica, un conocimiento de la electrónica, la destreza manual y la inteligencia. Buen oído y buena vista son esenciales. Poder trabajar sin interrumpir la rutina de la oficina es importante. Deben ser dignos de confianza porque se exponen a menudo a grandes cantidades de dinero. Deben también poder escribir horarios de mantenimiento, respetar el plazo fijado y hacer reparos de emergencia. Los aprendices reciben uno
to obtain special instruction in new techniques. They may move into sales positions to increase their earnings, become managers or open their own shops.

Earnings.--Beginners generally earn about $200.00 per week. The more complicated the machine, the higher the repairer's salary. Repairers generally dress in business suits. Injuries are infrequent.

El sueldo.--Los principiantes generalmente ganan a eso de $200.00 por semana. Entre más complicada es la máquina, más alto es el salario de los reparadores. Los reparadores generalmente se visten en ropa de negocios.
The future.—Business and government are buying more machines to cover more paperwork. Thus, there will be a greatly increased need. Because many business machines are becoming electronic, those with electronic training will have many job opportunities. Since office machines must always be kept in repair, business machine repairers have steady work.

Las heridas son infrecuentes.

El futuro.—Las compañías y el gobierno compran más máquinas para más trabajo de papel. Por esta razón, habrá una necesidad más aumentada. Porque muchas máquinas de negocios se vuelven electrónicos, esos con el entrenamiento electrónico tendrán muchas oportunidades de empleo. Porque máquinas de oficina deben estar reparadas, los reparadores de máquinas de negocios tienen trabajo regular.

**Television and Radio Service Repairmen**

What they do.—Technicians repair radios, small stereo components, tape recorders, intercoms, and public address systems.

Los técnicos de televisión y de radio

Lo que hacen.—Los técnicos de televisión y de radio reparan los radios, las televisiones y los componentes de estereos,
They use specialized instruments to locate the causes of problems. They carry small parts with them, but large parts must be replaced in the shop.

Where they work.—Many television and radio technicians are self-employed. The rest work in shops that sell radios and televisions.

Training.—Electronic training is required to become a good radio-TV technician. Skill in math and physics is necessary for entering this field. At least two years practical experience is required before a technician is considered experienced. It is also possible to learn the trade through las grabadoras, los sistemas de intercomunicación y las instalaciones de altavoces.

Donde trabajan.—Muchos técnicos de televisión y de radio trabajan por cuenta propia. Los demás trabajan en las tiendas que venden los radios y las televisorones.

El entrenamiento.—El entrenamiento electrónico se requiere para llegar a ser buen técnico de radio y televisión. La habilidad en la matemática, la física es necesaria para entrar en este campo. Al menos dos años de experiencia práctica se requiere antes de que un técnico se considere experto. Es
an apprenticeship. Manufacturers, employers and trade associations provide training through workshops. They must know how electronic circuits work as well as being able to manipulate small parts and tools. Some states require the technicians be licensed, having passed an exam in circuitry and shown skill in using electronic equipment.

**Earnings.**—Technicians may earn from $5.00 to $10.00 per hour based on skill level, type of employer and geographic location. There is some physical strain and hazard in work on roofs and electrical shock while installing

**El sueldo.**—Los técnicos pueden ganar desde $5.00 hasta $10.00 por hora basado en el nivel de habilidad, el tipo de empleador y la locación geográfica. Hay algún esfuerzo y peligro en el trabajo en las
antennas.

The future. — There will be an increase in the need for technicians due to more electronic products being produced and needing repair. There are also many new electronic products that are not used for entertainment that will require repairs.

Computer Science Technicians

What they do. — They keep in order computers and other related machines such as magnetic tape readers and high speed printers. They adjust, oil, and clear mechanical parts. To find out where in a computer system a malfunction is occurring is very difficult.
The technician must learn to use special equipment which the employer supplies. Technicians must also be familiar with repair manuals for each piece of equipment. They work with people, answering questions, complaints and offering advice.

Where they work.—They work for companies that provide maintenance services and for manufacturers of equipment. They work out of regional offices located in major cities. They are assigned to several clients according to specialty and type of equipment. They travel from place to place maintaining systems and

sistema de computadoras un funcionamiento defectuoso se ocurre. El técnico debe aprender usar el equipo especial que provee el empleador. Los técnicos deben también familiarizarse con los manuales de reparación para cada pieza del equipo. Trabajan con la gente, contestando a las preguntas, las quejas, o ofreciendo consejo.

Donde trabajan.—Trabajan para compañías que proveen los servicios de mantenimiento del equipo de computador. Trabajan en las oficinas regionales situadas en las ciudades mayores. Se asignan a varios clientes según su especialidad y el tipo de equipo. Viajan de sitio a sitio manteniendo los
and making emergency repairs.

**Training.**—Some post high school training in basic electronics or electrical engineering is necessary. This training can be gained through vocational schools or junior colleges. Good close vision and good color perception are necessary to work with color coded wiring. Pleasant personality, good appearance are necessary due to close contact with customers. Company training centers teach elementary computer theory. Trainees must also complete six months to two years of on-the-job training to specialize in a particular field. Some technicians work as trouble-shooters; others work with engineers in designing equipment and developing sistemas y haciendo los reparos de emergencia.

**El entrenamiento.**—El entrenamiento después de la escuela en la electrónica básica o la ingeniería eléctrica es necesario. Este entrenamiento está en las escuelas vocacionales o en los colegios de dos años. Buena vista de cerca y buena percepción de color son necesarios para trabajar en la instalación eléctrica que está cifrada a colores. Una personalidad amable, una buena apariencia son necesarias debido al contacto de cerca con los clientes. Los centros de entrenamiento de la compañía enseñan la teoría elemental de computador, la matemática de computador, y la teoría de circuito. Un aprendiz debe
maintenance procedures. Those with leadership ability may become service managers or supervisors.

Earnings.—Computer technicians average from $200.00 to $250.00 per week. Highly skilled specialists may earn over $400.00 per week. Technicians must be available to make repairs at any time.

El sueldo.—Los técnicos de computadoras ganan un sueldo promedio de $200.00 a $250.00 por semana. Los especialistas con mucha habilidad pueden ganar más de $400.00 por semana. Los técnicos
Many technicians earn much over-time pay.

The future.--As the economy grows, more computer equipment will be used to maintain it. The development of new uses for computers will also encourage demand such as medicine, traffic control and education.

Maintenance Electricians

What they do.--They maintain lighting systems, transformers, and generators as well as install new electrical equipment. They practice a lot of preventive maintenance--inspecting before breakdowns occur. They may work from blueprints or wiring diagrams.

deben estar disponibles hacer reparos a cualquier hora.

El futuro.--Al crecer la economía, más equipo de computadoras será usado y más técnicos serán necesarios para mantenerlas. El desarrollo de los nuevos usos para las computadoras estimulará la demanda como en la medicina, el control de tráfico y la educación.

Los eléctricistas de mantenimiento

Lo que hacen.--Mantenien los sistemas de luz, los transformadores, y los generadores, así como instalan nuevos equipos eléctricos. Practican mucho el mantenimiento--preventivo inspeccionando antes de que ocurran las averías. Pueden trabajar de diagramas
They use meters to locate faulty equipment.

Where they work.—They work in manufacturing industries that make cars, machinery, chemicals, aluminium, iron and steel.

Some are employed by public utilities, railroads and Federal, State and local governments. Heavily industrialized states employ many electricians.

Training.—This trade is learned on the job or through apprenticeship programs. Many apprenticeship programs are so comprehensive that those who complete could qualify as maintenance or construction electricians. An apprenticeship generally

Usan contadores para localizar el equipo que no funciona.

Donde trabajan.—Trabajan en industrias de fabricantes que hacen automóviles, la maquinaria, los químicos, el aluminio, el hierro y el acero.

Algunos son empleados por las empresas de servicios públicos, los ferrocarriles y los gobiernos. Los estados con mucha industria emplean muchos electricistas.

El entrenamiento.—Esta ocupación se aprende en el empleo. Muchos programas de aprendiz son tan amplios que esos que completan el programa pueden calificar como electricistas de mantenimiento o de construcción.
lasts four years. Training may include motor repair, wire splicing, installation and repair of electronic controls and circuits, also welding and brazing. On-the-job training may take longer than four years. To qualify for an apprenticeship an applicant must be eighteen years old, a high school graduate with one year of algebra. Many cities and counties require that electricians be licensed, and then they must pass a test. They might advance to plant supervisor.

Earnings.--Wages range from $6.00 to $10.00 per hour. Apprentices earn sixty per cent. They must Un aprendizaje dura generalmente cuatro años. El entrenamiento puede incluir el reparo de motores, el empalme de alambres, la instalación y reparo de los controles y los circuitos, así como la soldadura. El entrenamiento en el empleo puede durar más de cuatro años. Para calificar para un aprendiz un aplicante debe tener dieciocho años, ser un graduado de la escuela secundaria con un año de algebra. Muchas ciudades requieren que los electricistas tengan un licenciado y deben pasar un examen. Podrían avanzar a supervisores de una fábrica.

los sueldos.--Los salarios varían de $6.00 hasta $10.00 por hora. Los aprendices ganan sesenta
be careful as they work near high voltage wiring. They use protective equipment and clothing and are taught to fight small electrical fires. There are many unions who organize electricians.

The future.--More electrical and electronic equipment will create more jobs for maintenance electricians. If construction activity is slow, unemployed construction electricians might apply for maintenance electricians openings which would cause competition.

Appliance Repairers

What they do.--They specialize in repairing small appliances or major por ciento de esa cifra. Deben tener cuidado porque trabajan cerca de alta tensión. Usan el equipo y ropa de protección y les enseñan a combatir pequeños fuegos eléctricos. Hay muchos sindicatos que organizan a los electricistas.

El futuro.--Más equipo eléctrico creará más empleos para los electricistas de mantenimiento. Si la actividad de la construcción está lenta, los electricistas de construcción sin empleo pueden aplicar para los empleos y causar la competencia.

Los reparadores de aparatos eléctricos

Lo que hacen.--Se especializan en reparar aparatos eléctricos pequeños
appliances. They do not install major appliances, usually. They carry their tools in the truck and do the main repairs in the home. They answer customer questions about appliances. They advise customers about care and use of appliances. They may give customers estimates on repair costs and collect payment. They may also keep records of the hours used on each job.

Where they work.--Independent appliance stores and repair shops employ many. Service centers, department stores, wholesalers and gas and utility companies also employ appliance repairers.

Los aparatos generalmente. Llevan sus herramientas en el camión y hacen las grandes reparaciones en la casa. Contestan las preguntas de los clientes. Aconsejan a los clientes acerca del cuidado y el uso de los aparatos. Pueden dar a los clientes estimación en las cuentas de reparación y cobran pago. Pueden también guardar notas de las horas en el empleo.

Donde trabajan.--Las tiendas de aparatos emplean a muchos. Los centros de servicios, los almacenes grandes, los comerciantes y las compañías de gas y las empresas de servicio público también emplean a los reparadores de aparatos eléctricos.
Training.--Formal training in appliance repair is available from technical schools and community colleges. Graduates still must gain on-the-job experience to become fully qualified. To work in customers' homes they must be able to get along with people. Experienced repairers may open their own shops or appliance stores.

Salary.--Wages range from $5.00 to $15.00 per hour. Skill, experience, geographic location, and type of equipment serviced will determine the level of wages. Repair shops generally have good working conditions. Those who repair in the homes may spend several hours per

El entrenamiento.--El entrenamiento en la reparación de aparatos eléctricos es disponible en las escuelas técnicas y los colegios de la comunidad. Los graduados deben ganar la experiencia en el empleo para llegar a ser cualificados. Trabajan en las casas de los clientes necesitan poder relacionarse con la gente. Los reparadores con experiencia pueden abrir sus tiendas propias.

El sueldo.--Los salarios varían desde $5.00 hasta $15.00 por hora. La habilidad, la experiencia, el tipo de equipo determinarán el nivel del sueldo. Las tiendas de reparación en general tienen buenas condiciones para trabajar. Esos que reparan en las casas pueden pasar varias
day driving.

The future.--More appliances, increased income, and increased populations will result in the need for more qualified appliance repairers. This work is steady work because appliance repair work is stable despite the economic conditions.

El futuro.--Más aparatos eléctricos, más salario y más población resultarán en la necesidad de más reparadores calificados en aparatos eléctricos. Este trabajo es constante porque a pesar de las condiciones económicas, el trabajo de reparación es constante.
CHAPTER BIBLIOGRAPHY


A formative design, the focusing of evaluation on the intermediate stages of the development of the teaching instrument, was used to evaluate this bilingual career education module. Four types of evaluation were used: context evaluation in designing an introduction to the career clusters for a population that is not predominately English-speaking, input evaluation in setting up the module, process evaluation as the basis of modification and change as the material is used and product evaluation in determining whether or not the program accomplished its objectives.

As previously stated in Chapter I, the purpose of context evaluation is to provide a rationale for the determination of objectives. In context evaluation the relevant environment is defined, and unmet needs and unused opportunities are identified (5, p. 18).

Context Evaluation

It is fallacious to consider Hispanic-Americans as a homogeneous group (6, p. 197). Educators need to be aware of existing differences between new immigrants and those Spanish-speaking persons born in the United States.
The more recent immigrants are at a much greater disadvantage linguistically. They may also be the objects of resentment by their more established Spanish-speaking counterparts (16, p. 167).

Within the Spanish-surnamed peoples there are generally four distinct groups recognized: those who speak Spanish only, those who speak and understand more Spanish than English, those who understand more English than Spanish and those who understand only English. A parallel could be drawn to those groups that are culturally isolated, those that are somewhat assimilated, those that are almost completely assimilated and those that are completely assimilated into the Anglo cultural mainstream. (1, p. 170).

Baral distinguished these groupings in terms of life styles. Those of Anglo-Saxon conformity have moved away from their cultural heritage. Those with distinct cultural differences live in barrios, and maintain the common features of Spanish language usage, celebration of fiestas, and enjoyment of traditional food and music (3, p. 23). Those of realigned pluralism have taken up ways of the dominant society, but have established activities and institutions that are ethnically oriented and parallel to those of the dominant society. Those who have achieved biculturalism function in both cultures (3, p. 30).
It is impossible to stereotype specific traits of personality to one particular minority group. Much depends on the country of origin, the educational and economic level of the parents and the educational and economic aspirations of the parents for their children. The Spanish-speakers are as different as the countries from which they emigrate. That they come to America looking for a better life is one very common bond. Some of the adults come with a marketable skill, and some have nothing but their desire to work. Most hope that their children will have a better life than they have had, economically (1, p. 52).

Differences of opinion regarding so-called typical traits of Spanish-speakers are evident in the literature, even among the Hispanic-Americans themselves. Traits such as passivity, laziness, low competitiveness, present time orientation and low aspirational level are often ascribed to Hispanic-Americans (7, p. 55). Those adjectives could be used to describe many minority groups of low socio-economic levels. Those characteristics are not reserved for Hispanic-Americans in particular.

The students to benefit most from this particular bilingual career education module would fall into either the group that speaks and understands no English or the group that speaks and understands more Spanish than English. These students would usually be found in an English-as-
a-second-language class in a secondary school. These Spanish language dominant students would have scant opportunities to learn about career information except through a bilingual career education module.

These English-as-a-second-language students might be recently emigrated to the United States. Their proficiency in English would vary according to environmental conditions. Many would have had some English language training in their mother countries. Some of these students are from middle and upper class families (16, p. 152).

The transitory nature of parental employment can result in irregular school attendance. Many of these students are not interested in school, because it is so difficult for them to understand most of their classes where only English is spoken. They have no way to relate what they are supposed to be learning to relevance in the work world. These students are very much a part of Spanish culture. They enjoy the music and food, periodically recalling the customs and ways of life in their native countries (16, p. 160).

The pattern of adjustment of the family to urban ways of life and the urban educational system is significant when designing curriculum materials (11, p. 254). A Spanish-speaking person living in an urban setting is far more acculturated than one from a rural setting. The type
of community that the student lived in previously will influence his expectations and learning perceptions (11, p. 258). A youth who lived in San Juan Teotihuacan, Mexico, is quite different from one reared in Monterrey; just as one who grows up in Dallas, Texas, will have a set of cultural values different from those of one raised in Kingsville, Texas, disregarding economic levels or whether the youths spent the greater part of their time in a Spanish-speaking community.

Educators in working with Spanish-dominant students need to be aware that old stereotypes such as devaluing formal education, considering success in terms of non-material rewards, being conservative, non-scientific or protagonistic would not be applied in working with these students. Sometimes the working parents of these students are underemployed in relation to the jobs they held in their home country (17, p. 139). Some of this loss might be attributed to the fact that there are more jobs in service occupations available in the United States than in their native countries (17, p. 139).

The societal characteristics of a target population are important factors in creating the context evaluation for a bilingual career education module. The distinct cultural background of the Hispanic-American student calls for creative, bilingual curriculum in the area of career education.
Imput Evaluation

As previously defined in Chapter I, input evaluation includes all of the factors to be considered in designing and implementing the module. Upon evaluation of the alternatives to be used in implementing the program, input from counselors and instructors determined that group sessions would allow the greatest opportunity for group interaction as well as opportunities for one-to-one relationships to develop between the group leaders and group participants. All group members were to focus on the problem of becoming aware of many different careers and job fields while at the same time dealing with their individual concerns and aspirations. The group facilitators function as resource persons, provide information and stimulate discussions. Those serving as facilitators would benefit from knowing group dynamic skills, understanding how to keep discussion focused on a topic, and redirecting the discussion if necessary (6, p. 33). To interact effectively the students need to be relaxed, feel free to speak in either language, and to ask questions. The warm-up activities at the beginning of each session help to set the tone for successful interaction between the students and the facilitators.

The abilities and talents of the facilitators are an important factor in deciding how to present the module bilingually. An English-as-a-second-language teacher
with the aid of a bilingual counselor, or a bilingual vocational teacher would be a workable team. Much of the career material in this bilingual career education module was previously piloted in a monolingual career education workshop for disadvantaged students the previous year using counselors as group leaders. That particular monolingual workshop was so successful for English-speaking students that its methodology was presented at the local, state, and national guidance association and vocational association conventions in 1979.

It was through the input of the English-as-a-second-language instructors who would have liked a similar workshop for those students who could not understand English that this bilingual career education module began to be developed. It was considered that two facilitators would be more successful than one in presenting the bilingual career education material using a team teaching approach.

If the group facilitators had not worked together before, the input evaluation could contain a discussion of how the leadership role would be apportioned. For example, who would speak which language or which strategies could be most successfully led by each facilitator.

Other components of an input evaluation are the community resources, which classes would participate, the expectations for group behavior, the physical facilities for the groups and the timing of the sessions. Clusters
and job descriptions, group strategies and instruments would be selected from the material as designed in the bilingual career education module (9).

Community resources could be used to an advantage in a module such as this one. The availability of the names of persons in the community who are willing to discuss their jobs with students and who are bilingual would be a very important factor in the presentation of the module. Often there are faculty members with second jobs or avocations who could enrich a bilingual career module. A component of the input evaluation would be to list such resources and determine their role in the presentation of the clusters (6, p. 35).

The groups selected to benefit from this bilingual career education module could be selected because of their difficulty with English, or because the students were learning Spanish as a foreign language in a Spanish language class. Most Spanish-dominant students could benefit from exposure to this bilingual career education module. The module could also be presented to predominantly Spanish-speaking classes that have difficulty in understanding English.

The program description is presented as part of the input evaluation. The bilingual career clusters could be presented each on one single day with oral presentations of the job descriptions by the facilitators.
These presentations could be varied in many ways. They could be presented sentence by sentence in alternate languages, slowly, or they could be presented as a flow of conversation in one language and then in the other. It would be possible to tape these presentations for individual and group use (9).

The students would be instructed before the presentations that they would be responsible for using the material in simulation strategies later in the hour. This announcement would help to keep attention at a high point of focus. The facilitators would prearrange the class into small groups of six to eight students. These students would be chosen to effect a balance of class leaders and quiet students among the groups. Each group would choose a group captain who would report the group's answers to various questions asked by the facilitator concerning the job information presented (9).

The initial presentation to the students gives an outline of what type of material they will be learning and how the groups will be divided. A daily grade would be given each student for each session by the facilitators. The students are aware that the grade is based on participation, conduct and attendance (9).

The strategies used in this bilingual career education module were selected because of their success in a previously piloted career education program for the
disadvantaged written in English only (9). These strategies could adapt well to groups where the students did not read or write any language well (9).

Each day that the material is used, a warm-up exercise could be employed to initiate the activities. This exercise would help a class to relax and be receptive to participating in more involved strategies, especially if they were not used to group work. Name tags could be used as a sample warm-up activity. This activity would be a structured means of allowing students to know each other better. Questions would be asked, and the answers written on the name tags (9).

Decision-making activities could be value-voting, forced choices or rank order questions. In a value-voting exercise the students would indicate by hand gestures whether they would like or dislike a certain career activity. They would indicate negative and affirmative responses by corresponding hand gestures. Forced choices strategies ask the student to choose between two occupations; such as being a plumber rather than a painter. The facilitator would bilingually state the forced choice. The students would repeat the statement with the name of the occupation they liked best. Another decision-making strategy is rank order questions. The facilitators compose three statements for the students to rank according to their preference. The student would respond in
Spanish and in English. For example, the facilitator might suggest that the student choose which he would enjoy using the most—a sewing machine, a hammer or a typewriter. These strategies give the students practice in thinking for themselves (9).

For the strategy "Career Champions" the facilitator would write questions concerning the job descriptions and whatever oral career information might have been covered in class. The facilitator would ask the entire class a question bilingually. Each group captain would orally give the answer for the groups when called upon. This type of group exercise could be used over and over with different job information. The selected vocabulary words included in each cluster could be effectively used with this activity (9).

"What's My Career?" is another strategy that could be alternated with "Career Champions". The students would be given a card with a bilingually written job description to be pantomimed. Each student in each group would have a different job description. A student would pantomine a job description before the groups. The groups would be asked to name the job being pantomined (9).

The module would be evaluated subjectively by the facilitators and by the participants. The students would be asked to fill out an evaluation form which included bilingual questions regarding physical arrangements, time
schedule, effectiveness of strategies and suggestions for improving the module (9).

Process Evaluation

Process evaluation would be written as each cluster would be concluded in this bilingual career education module. After each session the facilitators would evaluate the effectiveness of the procedures used so as to decide what changes if any should be made in the format of the next session. Process evaluation would include the plan for each session, a post-session description of what actually took place, and the facilitators' subjective evaluation of the session and its relation to the cluster and the module as a whole. The written plan for each session would include the time allotments for the various activities, a description of the activities, and a listing of the resources and the materials to be used (6, p. 44).

The post-session description would indicate exactly what took place. The time allotted to activities, the enthusiasm for the activities, the reaction to the activities, interruptions, any disciplinary action and during which activity it occurred would all be noted in this section.

The facilitators' evaluation would be of a more subjective nature, possibly concerning rewriting certain parts of the material that would be too easy or too
difficult, deleting other parts, and adding various items of information. Any decisions regarding changes in the format or presentation of the material would be noted at that time (6, p. 61).

**Product Evaluation**

Product evaluation would be the fourth evaluative element in this formative design. Whether or not the module met the needs for which it was designed must be decided by the evaluation. The oral participation in the presentations and the responses to the strategies of the students as they participated in the bilingual career strategies would be extremely important in evaluating the success of the project. The facilitators would give their own written evaluations and call upon impartial bilingual observers to evaluate the group interaction processes (6, p. 65).

The product evaluation would be the final step in the formative evaluation process. The students would be asked to evaluate the bilingual career information workshop on individual bilingual evaluation forms. These responses and the suggestions for improvement or change therein would be very useful to the group facilitators in further modifying the module.

The facilitators would write a detailed evaluation of the entire module after all twelve clusters had been fully utilized. Attention would be given to the timing of the presentations, whether the module was presented as a
two-week workshop or spaced throughout a semester. The facilitators would react to their own effect upon the students. It would be at this stage that the entire module could be updated or critiqued in relation to its purpose of bringing bilingual career awareness to those who previously might have lacked formal instruction in that area (6. p. 68).

This formative evaluation plan could provide a working frame of reference for making decisions, handling crises, and checking that activities were still on target towards the original goals. This is a plan that could be carefully refined, continuously updated and even charged as one learned from experience and discovered new opportunities. It could be a means to an end, rather than an end in itself (2, p. 9).
CHAPTER BIBLIOGRAPHY


CHAPTER V

SUMMARY, FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The purpose of this study was to develop a bilingual career education module for students who speak Spanish as a predominant language. By employing a workshop approach to introducing the career clusters, it is possible to develop a bilingual career education module that can be used by bilingual counselors and instructors to distribute bilingual career information to predominantly Spanish-speaking students.

By employing a formative evaluation design it would be possible to systematically plan, implement and evaluate the module. Four types of evaluation could be used: context evaluation in designing a bilingual career awareness module for a predominantly Spanish-speaking population, input evaluation in setting up the module, process evaluation as the basis for modifying the module as it progresses, and product evaluation in determining if the program accomplishes its objectives.

Today, due to the increasing complexity of our society, it is more necessary than ever to be aware of job opportunities and career options. The needs of students from
culturally different backgrounds deserve consideration.

The need for a bilingual career education module was clarified and justified in Chapter I. Reference was made to the scarcity of bilingual career education materials at the secondary school level. Chapter II reviewed the literature in vocational education, career education, and bilingual education bringing those three disciplines into focus in the present so that the influence of each discipline could be manifested in the actualization of a bilingual career education module.

Chapter III is the bilingual education module, which is composed of twelve clusters to include construction trades; industrial production; office occupations; sales occupations; mechanics and repairmen; health occupations; service occupations; education and related occupations; art, design, and communications; science and agriculture; transportation services; and social services. Each cluster was designed to include five bilingual job descriptions, vocabulary, and interest questions to be used by the group facilitators.

Chapter IV explains the four part formative evaluation design used to create the bilingual career education module. The first part, context evaluation, describes the target population as being predominantly Spanish-speaking students, clarifying their need for bilingual career education material. The second component, the
input evaluation, is significant in the development and writing of the module, taking into consideration all available expertise and resources. The third component, process evaluation, could be used in consistently evaluating and reevaluating the clusters as they are presented. A possible plan for presenting the clusters is suggested. The fourth part, product evaluation, could be used to assess whether or not the objectives of the module were met. The careful and continuous monitoring of the module, evaluating each step, as well as the total module would make possible orderly improvement of the presentations.

Findings

As a result of the researching and writing of this module it has been found that

1. There is a paucity of materials that blend career education theory with bilingual education theory available to students who speak predominantly Spanish and the instructors who work with them.

2. Current educational practices in career education can be applied to the development of a bilingual career education module. The techniques used to present career education material in one language can be expanded to include two languages.

3. A review of the history of vocational education from 1917 through the present underlined the importance of vocational training for many students, not only those
students who speak only English, but those for whom a second language would be predominant.

4. Current teaching theory in bilingual education could be applied to the development of a bilingual career education module. The module would be designed to lend itself to the concepts of current bilingual teaching theories.

5. Current teaching methodology in bilingual education could be applied to the development of a bilingual career education module. Predominantly Spanish-speaking, predominantly English-speaking, or a blend of both languages could be used with the bilingual career education module.

6. Formative evaluation techniques would be useful in the development of a bilingual career education module. The use of context and input evaluation was demonstrated in the writing of this bilingual career education module. The use of process and product evaluation was clarified for further use of the module.

Conclusions

It was concluded that

1. The development of a bilingual career education module for use by students who speak predominately Spanish and their instructors would be beneficial for both educators and students.
2. The development of a bilingual career education module could be strengthened by using current educational practices employed in monolingual career education modules.

3. The development of a bilingual career education module would be useful in informing students who would not speak English of the various vocational training programs that would be available to them. The importance accorded to vocational education and bilingual education through federal funding indicated that it would be important for as many students as possible to be aware of vocational programs available to them. A bilingual career education module could explain jobs taught through those programs.

4. Current teaching theory in bilingual education could be enhanced through using a bilingual career education module as a teaching medium. Student interest to learn the second language might be heightened when the material presented pertained to jobs that might be part of the students' personal career futures.

5. The acquisition of a second language could be enhanced by using a bilingual career education module as a medium of teaching the language as well as the career content. The vocabulary included in a bilingual career education module would be particularly useful to students learning English.
6. The application of formative evaluation techniques to the development of a bilingual career education module would be valuable in refining the module as it was written, and finally as it would be used.

Recommendations

1. It is recommended that this bilingual career education module be expanded to include students who speak other dominant foreign languages such as Laotian, Vietnamese, Portuguese, Korean, and French. In certain school settings there are students who speak many foreign languages who are enrolled in one classroom learning English. Many times the teacher does not speak each of these languages. A bilingual career education module such as this one experienced by the student who does not understand English might make the world of work more meaningful.

2. It is recommended that a bilingual career education module be included as a part of the curriculum offered secondary school pupils who enroll unable to speak or understand English.

3. It is recommended that this module be expanded to include analysis and discussion of personal skills, interests and aptitudes presented bilingually.

4. It is recommended that the facilitators should have a knowledge of the cultural background of the students
as well as its effect on their career planning.

5. It is recommended that formative evaluation be a component of future modules designed for foreign language dominant students. Through step by step process evaluation responsive faculties can be further assured that modules are meeting the needs for which they were designed. As populations change over time, the content and format of a bilingual career education module might require revision.
Dear Mrs. Shiflett,

Enclosed you will find a copy of a bilingual career education cluster introduction for use at grade levels 7-12. It is the first of twelve to be a part of the dissertation I am writing.

My intent is to prepare materials that a teacher can use for career education who has non-English-speaking students in class. The method of presentation is individual. Appropriate activities will be included. The project is one of career education.

I hope you will read it, make any corrections in the Spanish that you think necessary and then return it to me. I appreciate your help.

Sincerely,

Tanis Weiss
Mr. Gonzalo Garcia  
The National Center for  
Research in Vocational  
Education  
1960 Kenny Road  
Columbus, Ohio 43210

Dear Mr. Garcia,

Enclosed you will find a copy of a bilingual career education cluster introduction for use at grade levels 7-12. It is the first of twelve to be a part of the dissertation I am writing.

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Sincerely,

Tanis Weiss
Dear Mr. Gonzalez,

I spoke with you by phone in mid-July regarding a bilingual career education module that I have designed as part of my graduate work at North Texas State University. Dr. Noe Flores suggested that you would be an excellent person to read the module.

I am very grateful that you will be able to read it. Please make any corrections that you think necessary in either the content or the Spanish grammar. I have taught Spanish, but my Spanish was learned in school, not bilingually.

This module is intended for use with high school students who use more Spanish than English. Perhaps after revisions it would be useful to your project.

I would appreciate your reading the module and returning it as soon as possible so I can make any necessary revisions. I can be reached at 528-8804 in the day and 239-9094 in the evening.

Thank you.

Sincerely,

Tanis Weiss
Ms. Elsa Sanchez de la Vega  
Bilingual Curriculum Editor  
National Dissemination and  
Assessment Center for Bilingual  
Education  
7703 North Lamar  
Austin, Texas 78752

Dear Ms. Sanchez,

Enclosed you will find a copy of a bilingual career education cluster introduction for use at grade levels 7-12. It is the first of twelve to be a part of the dissertation I am writing.

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I hope you will read it, make any corrections in the Spanish that you think necessary and then return it to me. I appreciate your help.

Sincerely,

Tanis Weiss
Mr. Jose Gonzalez, Director
Fuerza de Barrios
511 E. Bluff
Ft. Worth, Texas 76102

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I would appreciate your reading the module and returning it as soon as possible so I can make any necessary revisions before I type the final dissertation form by November 15th. I will be honored to include your name among the authorities who have read this module, and I appreciate your cooperation in helping me to perfect this work.

Sincerely,

Tanis Weiss
Dear Dr. Noe Flores,

Department of Bilingual Education
Texas Wesleyan College
Fort Worth, Texas 76105

I spoke with you by phone in early September regarding a bilingual career education module that I have designed as part of my doctoral work for Dr. Pat McLeod at North Texas State University. Dr. McLeod suggested that you would be an excellent bilingual authority to read the module.

I am very grateful that you will be able to read it. Please make any corrections that you think necessary in either the context or the Spanish grammar. I have taught Spanish grammar, but my Spanish was learned in school, not bilingually.

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Tanis Weiss
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