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ABSTRACT

Evaluation and documentation of the type and quality of occupational training that is available to minority high school students was presented in this study. The school-to-work transition for a tri-ethnic population (black, Anglo, and Mexican American) was compared three different ways--among ethnic groups, within ethnic groups by vocational education or nonvocational education program, and by ethnic groups and program. Student data were gathered by a largely closed-ended questionnaire. The goals and objectives of this study related to black vocational education, tri-ethnic analysis, vocational education composition and enrollment analysis, and a thorough demographic analysis. Part 1 discussed the findings of a previous study which were responsible for the present research effort project goals, general methodology, description of target population, and the organization and phasing utilized in its execution. Part 2 analyzed and compared characteristics, attitudes, aspirations, and problems of 1,600 black, Mexican American, and Anglo students in six urban Texas school districts with large minority student populations. Part 3 summarized the results and discussed some of the implications which this and other studies have for vocational education in Texas and the role of occupational research activities. Many issues concerning vocational education and minority youth were clarified in this study; other questions were raised. However, the data base established here should alert educators to and inform them about the special sensitivity of today's high school youth. (AH)

OCCUPATIONAL EDUCATION IN TEXAS:
AN ETHNIC COMPARISON

Submitted to

The Division of Occupational Research and Development

of the

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by

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INTRODUCTION

The school-to-work transition presents the young person of today with a difficult task which in many cases he is not adequately prepared to face. Recent trends indicate that more students than ever before are going directly into the labor market immediately after graduation from high school. Thus, secondary schools, especially occupational training programs, are faced with a special challenge--that of providing the kind of education and training that will equip the young job seeker with social and occupational skills which would facilitate his entry into the world of work.

As is often the case, minority youth are placed in a disadvantageous position when competing for jobs. Their education and training is many times substandard, and their needs and problems are more severe. The University of Houston, Center for Human Resources, under contract to the Texas Education Agency, Division of Occupational Research and Development, has been attempting to describe various dimensions of the minority high school student in Texas. By identifying specific school and job-related problems, educational structures will hopefully improve, adjust, initiate, or modify curricula and programs in order to better meet the needs of all students in secondary schools.

Occupational Education in Texas: An Ethnic Comparison is the second in a series of reports published by the University of Houston, Center for Human Resources. Other reports in this series include Black Youth and Occupational Education in Texas (June 1974), Manpower and Vocational Education in Texas (Summer 1974), and A Demographic Profile of Texas and Selected Cities (Summer 1974). A final report, Occupational Education in Texas: Summary and Conclusions, synthesizes the four project reports and discusses the implications of

the findings. The focus of the reports is on high school youth--who they are, what they think and feel, and what they want to do. A special effort is made to document the type and quality of occupational training available to them. Evaluation and documentation of this type can best be accomplished by conducting systematic research studies which provide timely and meaningful data to those concerned with the education and training of young people.

This report has three major sections. Part I discusses the findings of a previous study which were ultimately responsible for the initiation of the present research effort. It also describes the framework of the study--project goals, general methodology, description of target populations, and the organization and phasing utilized in its execution.

Part II analyzes and compares the characteristics, attitudes, aspirations, and problems of 1,605 Black, Mexican American, and Anglo students interviewed in 15 high schools located in six large metropolitan school districts which contained relatively large minority student populations.

Part III summarizes the results and discusses some of the implications which this and other studies have for vocational education in Texas. It also comments briefly on the role of occupational research activities.

Although many issues concerning vocational education and minority youth were clarified in this study, other questions were raised. However, the data base established here should alert educators to and inform t'.em about the special sensitivities of today's high school youth. Perhaps then educational institutions in Texas will be a step closer to preparing all students for a career compatible with their interests, aptitudes, and abilities.

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PART I

PROJECT GOALS, METHODOLOGY AND ORGANIZATION

Background of the Study

A recent study by the Center for Human Resources, University of Houston--* Mexican American Youth and Vocational Education in Texas (1973)--included, among other things, a data base on Mexican American high school students throughout the State of Texas. More than 2,100 respondents were interviewed--vocational and non-vocational students, high school graduates, dropouts, parents, employers, school personnel, and community informants. The respondents included nearly 1,700 high school students, with over 1,000 being vocational education students. Ten cities and school districts in Texas, mostly in the border regions and in the larger urban areas, were part of that project. The findings of the Mexican American study indicated that there were many changes taking place, not only in vocational education but in all facets of the educational environment. It also highlighted the problems of vocational education and particularly those facing Mexican American students. For instance, students interviewed consistently said that "getting a steady job" was their first post-high school preference. However, when vocational education enrollment patterns were compared to labor market demands, it was found that not only were Mexican American students over-represented in vocational education programs but that the programs in which they were enrolled did not coincide with available jobs in the labor market. These and other findings in the Mexican American study raised questions about other groups in the State. Do Black and Anglo American high school students exhibit similar patterns? Do these students have similar

aspirations or are there differences among the various ethnic subgroups? If so, what are these differences and what implications do they have for educational policymakers in Texas?

Although the study focused on the problems, needs, and aspirations of Mexican American youth, its findings and recommendations had wide ramifications in many areas of the educational process: occupational training and placement, career education, counseling and guidance, teacher and counselor training, organization and planning--including manpower analysis and adequate record keeping, curriculum development, the relationship of industry to education, and the need to clear up confusion regarding the role of vocational education both within the school setting and in the community at large. In some instances, it was found that vocational education still evoked a negative image. This seemed to be especially pronounced among upper and middle income parents and in certain segments of minority communities. Despite the realities of present day occupational needs there still seemed to be some resistance to vocational education at the high school level.

Thus, it was clear that the Mexican American study was but an initial step in attempting to ascertain the relationship between vocational education and minority groups in Texas. Consequently, the Division of Occupational Research and Development of the Texas Education Agency commissioned the Center for Human Resources, University of Houston, to continue and expand its research efforts in the area of occupational education for all students in the State.

In organizing and executing the present study, Vocational Education in Texas High Schools: An Ethnic Comparison, it was decided to follow basically the same format as in the previous study. However, certain necessary changes had to be implemented. For instance, student questionnaires were condensed

and modified for use with students of all ethnic groups. Other instruments for parents, community people, and the like also were restructured. Geographical areas containing a large Black or tri-ethnic population were selected for this study. In all, eleven communities were identified as target areas. All cities selected represented either East Texas locales and/or major urban areas. They are Marshall, Tyler, Port Arthur, Beaumont, Galveston, Dallas, Fort Worth, Waco, Austin, San Antonio, and Houston. The focus of the study was on the in-school vocational education student although a smaller sample of non-vocational students was interviewed for comparative purposes.

Project Goals and Objectives

The primary goals and objectives of this study relate to a Black vocational education study similar to the Mexican American study. Other objectives included a tri-ethnic analysis, a vocational education composition and enrollment analysis, and a thorough demographic analysis. The goals and objectives of the present study included:

*A Black Profile** - A major goal of this study was to document and describe the educational and training experiences of Black high school students and a limited number of graduates and dropouts in selected regions of the State of Texas. Specifically, some of the objectives were to:

Profile the Black youth who are in occupational education in Texas, both in terms of preparation for and participation in occupational education.

Document the experiences of Black youth who have been enrolled in occupational education as well as those who have not participated in such programs.

Profile the type, level, and quality of occupational education available to or made use of by Black youth in the selected regions.

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*A separate publication, Black Youth and Occupational Education in Texas, reports on the responses of over 1,500 Black students in 11 school districts.

Document the success and results of occupational education participation by Black youth in terms of labor market participation after training, job levels, and potential career mobility, employment/unemployment/underemployment and earnings.

Evaluate the relevancy of training areas in terms of employment opportunities in which Blacks are generally placed.

Evaluate the ancillary training services such as counseling, job placement, etc., available to or made use of by Black youth.

Assess the relationship between vocational education and union apprenticeship programs.

Profile the attitudes of school personnel at all levels toward Black youth in occupational and career education.

Make recommendations to the Texas Education Agency and selected school districts relative to program development and continuation based upon program relatedness and efficiency.

Document special programs or creative approaches that have been implemented by local school districts to assist Black youth in making the school-to-work transition.

Compare vocational enrollment patterns with manpower needs in the state and local areas, with special emphasis placed on Black youth.

*A Tri-Ethnic Analysis** - Another major objective of the study was to document the educational and training experiences of other youth in Texas by ethnicity in selected cities. These specific objectives include:

Profile a selected sample of Anglo Americans and Mexican Americans to obtain the same information as that for Blacks.

Compare selected findings of the Black project with the general findings of the Mexican American project.

Compare all three ethnic groups in at least three cities which have a substantial representation of each.

Special Services to Local School Districts - On the basis of information supplied by the previous project and that anticipated in the Black project, it was possible to provide orientation seminars at the local level. Also,

*The tri-ethnic analysis included six urban areas: Austin, Galveston, Fort Worth, Houston, Dallas, and San Antonio.

instruments were developed for evaluative purposes. Specifically, some of these secondary objectives were to:

Feed back the findings of the Mexican American project to the local communities which were involved in the study. This was to be in the form of an in-service seminar for administrators, teachers, and guidance personnel.

Include as part of the in-service seminar an orientation to the state and local labor markets and their trends and to relate this information to vocational education trends in local school districts.

Modify to the extent necessary selected instruments to be used in the tri-ethnic study in order to provide local school districts with questionnaires which could be utilized with both in-school and out-of-school youth. These instruments could assist in the evaluation of local vocational programs and ascertain the experiences of graduates and dropouts.

General Methodology and Description of Instruments

Each of the separate sections of these reports contains a *Note on Methodology* which describes in detail the procedure utilized for that particular analysis. This section explains the general approach used to implement the project and the type of instruments constructed to solicit the desired data from the various subgroups.

There were eight samples from which primary data were to be collected: vocational students (Form A), non-vocational students (Form B), vocational education graduates (Form C), school dropouts (Form D), employers (Form E), parents (Form F), school personnel (Form G), and community people (Form H). (The analysis of instruments C-H is included in another report.)

Most of the basic information in this project was gathered from in-school students, and therefore a brief, but highly structured instrument which could be administered in a group setting in the high schools was designed. This instrument, referred to as the A/B instrument, was a modification of the instrument used previously in the Mexican American study. It was pre-tested

for readability, length, and format in the Galveston Independent School District. Student questionnaires were administered in large group settings during the Fall Semester, 1974. The time required for completion was approximately one class period (45-55 minutes). It was the intent of this study to reach at least 200 students in each school district with approximately twice the number of students in vocational programs as in general academic programs. In the larger urban areas, more students were selected to allow for a tri-ethnic analysis. Over 2,500 students in 23 Texas high schools responded to this instrument; of this number over 1,500 were Blacks. The items in Form A/B covered a variety of topics, and the questionnaire was well received by the majority of the students. It focused on student characteristics, attitudes toward school and vocational education, post-high school preferences, migration plans for job or training opportunities, and other school related activities. The questionnaire was largely closed-ended and arranged for printing on forms for ease in coding on optical scanning sheets. A few open-ended items gave students an opportunity to express themselves more openly.

The C/D Form was used with a limited sample of graduates and dropouts, and the majority of interviews were conducted on a one-to-one basis by local personnel familiar with their communities contracted by the project. In addition to basic socioeconomic items, this questionnaire documented attitudes toward school, vocational education, and work and allowed for a follow-up of education, training, and employment data of graduates and dropouts.

The employer questionnaire (E) was used mainly to assess employer attitudes toward vocational education and students who had been through vocational education training in high school. This questionnaire relied more on semi-structured and open-ended items than the previous forms. It was administered mostly on a one-to-one basis.

Parents whose children were enrolled in vocational education programs in the high school were given a brief questionnaire (F) which solicited opinions concerning school and vocational education and inquired into their children's future plans. These interviews were conducted on a one-to-one basis by specially trained local personnel familiar with their communities.

Forms G and H were administered to school and community persons respectively. These semi-structured instruments were administered by project staff, and they inquired into attitudes toward vocational education, career education, and other related topics. Both were brief questionnaires which were very instrumental in orienting project staff to many problem areas and needs encountered in the schools.

To complement the acquisition of primary data, two other analyses were undertaken: a complete demographic analysis detailing state and local population characteristics, trends, and projections and an analysis of the labor force as related to current vocational programs. These two studies were continuous, ongoing activities during the course of the project and were conducted at project headquarters utilizing the latest census data counts and information provided by the Texas Education Agency and the Texas Employment Commission.

In all, eleven school districts were selected for the study, and over 3,000 persons were contacted and administered questionnaires by project staff and others authorized to assist in this endeavor. Analysis of data took place at the Center for Human Resources utilizing computer facilities at both the University of Houston and Rice University. All coding operations took place at the Center for Human Resources.

Project Phasing

The research project was divided into three major phases, each having a set of clearly identifiable objectives and deadlines. The three phases of this project are described below:

Phase I: Preparation and Feedback, March 1 to August 31, 1973

March 1 to April 30, 1973 - During this period project staff initiated preliminary revision of all instruments utilized in the Mexican American project. Priority was placed on the in-school instrument (A/B). It was the intent of the project staff to develop an instrument which all students could finish within 45 minutes (an average class period). The A/B instrument was developed by project staff and pre-tested in the Galveston Independent School District. Other instruments utilized by the project were also developed and finalized during this period. These included a high school graduate questionnaire (C), a questionnaire for school dropouts (D), and four other separate instruments used with employers (E), parents (F), school personnel (G), and community people (H).

May 1 to June 30, 1973 - During this period field work for selected target groups was initiated--employers, school personnel, and community informants. Initial contacts with school districts were also made at this time in order to establish schedules for workshops and seminars concerning feedback on Mexican American Project (local findings) and in-service training for vocational education personnel and other interested parties. Also, initial contacts were made in those cities which were to be surveyed in the Fall Semester, 1973. All questionnaires and codebooks to be used in the Fall survey were finalized. In addition, initial collection of demographic and manpower data was initiated.

July 1 to August 31, 1973 - Data contained in the Mexican American project were analyzed and packets prepared for each school district that participated in the survey. Student responses and manpower information was stressed in these packets. A total of five workshops were conducted throughout South and West Texas.* Interviewing of target population other than in-school students was continued during this period. Progress Report I submitted to funding agency.

Phase II: Field Phase, September 1, 1973 to January 31, 1974

September 1-30, 1973 - Survey schedules in selected cities were finalized. Project staff was oriented and trained for field phase and training materials and procedures for use with field personnel in target communities were developed.

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*Workshops were held in El Paso, Del Rio, Eagle Pass, Laredo (2) and Harlingen. The Harlingen workshop, held on the Texas State Technical Institute campus, included participants from throughout the Rio Grande Valley area.

October 1 to December 31, 1973 - This period saw the initiation of the field work in the schools to be surveyed. Emphasis was placed on completing all in-school interviewing during this phase. All other target groups--school personnel, employers, parents, community people, graduates, and dropouts--were interviewed during this period. Project staff recruited and trained local personnel in most areas to conduct out-of-school interviewing during this period. Also, coding of all in-school questionnaires was begun as soon as they were received from the field.

January 1-31, 1974 - This month was devoted to completion of the field phase. The bulk of the interviewing was completed by the end of January and a large portion of the coding of the out-of-school instruments was done during this period. Progress Report II was submitted to the funding agency.

Phase III: Analysis and Dissemination, February 1 to June 30, 1974

Completion of coding, analysis of data, and writing of final reports was accomplished during this period. Demographic and manpower analysis was intensified and completed during this phase. Final reports were submitted to the funding agency, and arrangements made for the dissemination of these reports.

Project Organization

The project was under the direction of two Co-Directors, Roberto S. Guerra and Robert L. Armstrong, who in turn were responsible to Dr. Joseph E. Champagne, Associate Director for Research, and Dr. J. Earl Williams, Director of the Center for Human Resources. Chief consultant to the project was Dr. Sam Schulman, Professor of Sociology at the University of Houston. Jo Ann Verdin (Data Analysis), Terry Mullins (Manpower) and Tatcho Mindiola (Demography) served as Research Associates. Randall Dowdell (Interviewer) assisted in a major portion of the field work. Project staff trained and supervised specially contracted personnel to assist in field interviewing and in coding phases of the project. Project staff received additional informal assistance and advice from a variety of sources: other Center staff, state and local educational personnel, manpower specialists throughout the state, and many other key informants in the communities surveyed.

PART II

AN ETHNIC COMPARISON OF OCCUPATIONAL EDUCATION IN TEXAS HIGH SCHOOLS

The Advisory Council for Technical-Vocational Education in Texas, among other groups, has long set as a priority the review and evaluation of technical vocational programs to determine if the needs of special groups, such as disadvantaged persons, ethnic and racial minorities, are being adequately served at the state and local levels. The Mexican American and Black high school student surveys conducted by the Center for Human Resources have been initial steps in that direction. The present study goes a step further and compares the three major ethnic groups in six Texas urban areas. Subsequent reports will concern themselves with the vocational education enrollment patterns in secondary schools; this report is limited to the analysis of VE/Non-VE minority and Anglo high school students in Texas high schools. Part II concerns itself with the observations given by these students to a variety of questions relating to themselves, school, vocational education, work, future plans, and other such questions.

In 1970 Texas had a total population of over 11 million persons. Mexican Americans, the largest ethnic group in the state, constitute approximately 18 percent of the population while Blacks, the second largest group, account for about 12 percent of the state population. However, the number of Blacks and Mexican Americans of high school age is considerably higher--24 percent and 22 percent, respectively.* Mexican Americans are located along the Texas-Mexico border and in the larger urban areas of the state. Blacks, on the other hand,

*Office of the Governor, Selected Demographic Characteristics from Census Data, Fourth Count, Office of Information Services, Austin, Texas, August, 1972.

are found in the eastern part of Texas, especially in the Houston, Dallas, and Fort Worth metropolitan areas. It should be noted that although the percentage of Mexican Americans in the border areas is high, only about one-third of all Mexican Americans in the state live there. Nearly half of all Mexican Americans reside in six large urban areas, none of which are on the border--San Antonio, Houston, Dallas, Fort Worth, Corpus Christi, and Austin.*

Compared to the Anglo population, Blacks and Mexican Americans generally have lower income levels, higher unemployment rates, and are more often underemployed. Both groups have similar occupational patterns; that is, they are underrepresented in the professional and technical jobs and overrepresented in the semiskilled category. Although Blacks have a higher educational attainment level than Mexican Americans, Mexican Americans have a slightly higher earning capacity. It is evident that despite recent advances in the civil rights area, minority groups in Texas, especially Blacks, still suffer economic and educational disparities.

The following section illustrates and describes some of the similarities and differences found between minority and Anglo high school students in Texas, and a limited number of observations are made concerning other vocational education studies conducted by the Center for Human Resources. An attempt is also made to assess the role of vocational education as it affects Black and Mexican American students in Texas high schools.

*A separate report published by the Center for Human Resources, A Demographic Profile of Texas and Selected Cities, describes in greater detail population characteristics and growth patterns in the state.

A Note on Methodology

Six cities were selected for this study: Austin, San Antonio, Houston, Dallas, Fort Worth, and Galveston.* All of these are metropolitan areas which contain relatively large numbers of the two major ethnic minority populations in Texas--Mexican Americans and Blacks--as well as substantial numbers of Anglos.

The A/B questionnaire was administered to students in these cities during the Fall Semester of the 1973-1974 school year.** Prior to working in each community, members of the project staff contacted local school district authorities, especially those directly concerned with occupational and vocational programs and counseling services. The purpose and scope of the study was explained to these persons, and in every case they agreed to work with the staff in any way possible.

School Authorities in each community worked directly with project staff in the selection of the student samples. The samples were selected so that there were approximately twice as many VE students as Non-VE students; the VE students represented the spectrum of available vocational-technical programs, and there were approximately equal numbers of Mexican American, Black and Anglo students represented. The total sample size in each community was 250 to 300. In order to cause as little interruption to school activities as possible, the general format for student selection was by class or instructional unit, although in a number of instances the local situation necessitated some modification of this procedure. Rosters of both VE and Non-VE students were developed, and classes were randomly selected until the required number of

*See Appendix A for the names of the school districts and high schools surveyed.

**Form A refers to the vocational students (VE) and Form B refers to the non-vocational students (Non-VE).

students in each program and ethnic group had been reached. At appropriate times in school schedules Form A/B was administered to entire classes by a member of the project staff or by a cooperating person in the school system. The A/B instrument was designed to be used during a single 45-55 minute class period. This allowed for a short statement of purpose, oral explanation of the instrument, response to questions, and self-administration of the instrument.

Data presented in this report is based on an analysis of 1,605 usable A/B Forms administered to the students. The data is compared in three different manners: among ethnic groups regardless of the program--VE or Non-VE; within ethnic groups by VE or Non-VE program; and by ethnic group and program.

Backgrounds of the Students

Of the 1,605 students interviewed, 470 were Anglos (29.3 percent), 490 were Mexican Americans (30.5 percent) and 645 were Blacks (40.2 percent). There were almost exactly twice as many VE students (1,067) as Non-VE students (538) represented. Table 1 breaks down the sample by ethnic group and program.

TABLE 1

VE Students and Non-VE Students by Ethnicity

Type Student	Ethnic Group							
	Anglo		Mexican American		Black		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
VE (A)	250	53.2%	373	76.1%	444	68.8%	1,067	66.5%
Non-VE (B)	220	46.8%	117	23.9%	201	31.2%	538	33.5%
Totals	470	100.0%	490	100.0%	645	100.0%	1,605	100.0%

About two-thirds of all the students were either 16 or 17 years of age, and the average age within each ethnic group was quite close: Anglos, 16.7 years; Mexican Americans, 16.8 years; Blacks, 16.5 years. For the entire sample there was a fairly even distribution by sex with 46.4 percent male and 53.6 percent female. However, only the Anglo subsample retained this close balance. Mexican American males outnumbered females by a ratio of six to four, and Black females outnumbered males by the same ratio. Three-quarters of the sample were in their junior or senior year in high school. Most of the remaining students were in the tenth grade, and a very few were in the ninth. Very few of the students were married (2.8 percent).

Typically, the students were born in Texas of Texas-born parents, although Anglo students had the greatest number of parents born out of state. About 17.0 percent of Mexican American parents were foreign born (almost all in Mexico), whereas only about 5.0 percent of Anglo parents and 0.5 percent of Black parents were foreign born. Nine out of ten of all students' fathers were working at the time of this survey. This number was slightly higher for Anglos and slightly lower for Mexican Americans and Blacks. There was a notable difference in the number of working mothers among ethnic groups: 66.6 percent of Black mothers were employed, 55.7 percent of Anglo mothers, and only 41.3 percent of Mexican American mothers. Very few of the parents were members of labor unions, with a third of the minority group students not knowing if either or both parents were union members or not.

Some family members of students in all ethnic groups had, at one time, worked in the agricultural migrant stream with a greater number among Mexican Americans (22.8 percent) than among Blacks (18.1 percent) or Anglos (11.9 percent). There was a considerable difference in the educational level attained

by students' parents. The educational level for both Anglos and Blacks was about 12 years, but for Mexican Americans generally it was less than the sixth grade. Mexican American VE students reported such low educational level for both parents; however, Mexican American Non-VE students indicated that their parents had attained a somewhat higher level.

In reporting the composition of their families, almost all students (91.4 percent) indicated that their mothers were at home; however, fewer reported that their fathers were at home (74.7 percent). Only 62.5 percent of Black students reported their fathers at home, while the number was much higher for Anglos (82.7 percent) and Mexican Americans (82.9 percent). Almost all the students had brothers or sisters. Black students had a slightly larger number of siblings at home (3.03) than did Mexican American students (2.77), and both minority groups had more than Anglo students (1.73). Although the numbers were small, both Mexican Americans and Blacks tended to have persons other than the nuclear family in their homes (grandparents, other relatives, non-family members).

The principal wage earner in students' families was the father; the next most important was the mother. Blacks, however, showed a much greater tendency for women to support the household than did the other groups. Among Anglos, the principal family wage earner was the father in 78.8 percent of the families and the mother in 12.8 percent; among Mexican Americans it was the father, 77.3 percent and the mother, 10.9 percent; but among Blacks, fathers accounted for 54.2 percent, and mothers, 34.7 percent. Mothers, thus were the principal source of income in Black students' families three times more often than in Anglo or Mexican American families. There was also a notable difference in principal wage earners between VE and Non-VE students, Anglo and Black. In

both cases, fathers were more often indicated as principal wage earners in the families of Non-VE students. Black VE students showed the lowest percentage of fathers as principal wage earners: 49.6 percent.

In all ethnic groups, wage earners in the students' households tended to be employed in unskilled, operative, semi-skilled and craft jobs. This concentration in lower level occupations, however, is much more marked for Mexican Americans and Blacks. While many Anglos also held some of these lower level less skilled jobs, they held professional and technical jobs in greater proportions than the minorities. The occupational stratification is more evident when combined with educational achievement as a two-factor index of socioeconomic status. Such an index, created by August Hollingshead, includes five broad levels of socioeconomic status: Level I, the highest, would generally include high status jobs and post-graduate or professional education; Level V, the lowest, would include low status jobs, little education or formal training; the other levels range between.* These levels were computed for principal wage earners in students' families. Level V, the lowest, included only 10.8 percent of the principal wage earners in Anglo families, 27.5 percent of those of Black families, and a striking 42.4 percent of those of Mexican American families. When Levels IV and V are combined, this classification is roughtly equivalent to a class encompassing most blue collar workers and lower status white collar workers. Mexican American principal wage earners were heavily concentrated at this level (84.8 percent; 72.3 percent of Black principal wage earners and 50.6 percent of Anglo principal wage earners were also found here. Level I, the highest, contained 12.8 percent of the Anglos, 3.7 percent of the Blacks, and 0.5 percent of the

*August B. Hollingshead, Two Factor Index of Social Position. (New Haven, Conn.: A. B. Hollingshead, 1957.)

Mexican Americans. Even among Mexican Americans there was a significant difference in the level of the principal wage earner in VE and Non-VE students' families. Forty-five percent of the principal wage earners in VE students' families were in Level V, 42.8 percent were in Level IV, and none were in Level I.

It is apparent that the socioeconomic levels of students' families in different ethnic groups were not the same. Mexican American and Black profiles resembled one another, but neither resembled the Anglos. The lowest of the profiles was that of Mexican American VE students, the highest was Non-VE Anglo students. This distinction must be kept in mind when examining many of the results of this study, for what might appear on the surface as an ethnic distinction may, in reality, be a function of socioeconomic status.

After High School, Then What?

Almost all students in the sample indicated a desire to complete their secondary education. Then what? What were their post-secondary expectations and aspirations? They were asked what they most wanted to do after graduation. Several post-high school alternatives were listed, and the student picked the one he most wanted to do. Table 2 shows the responses for all students. There were obviously three major preferred alternatives for all students: a steady job, university work, and advanced vocational/technical training. The other alternatives appear minor in comparison since they, collectively, comprise only 14.6 percent of all first preferences. More than one-third of all the students chose a steady job as their first preference. This was the first preference for Anglo and Mexican American students; for Blacks it followed close behind attending a university. For Anglos and Mexican Americans,

TABLE 2

Most Preferred Post-High School Alternative of VE and Non-VE Students, by Ethnic Group, in Percentages of Total Responses

Post-High School Alternative	Anglo		Mexican American		Black	
	VE N = 237	Non-VE N = 213	VE N = 342	Non-VE N = 112	VE N = 398	Non-VE N = 182
Steady job	42.6%	35.2%	41.5%	31.3%	35.7%	29.1%
Four-year college	25.7%	42.3%	22.8%	39.3%	34.9%	42.3%
Advanced voc./tech. training	13.9%	12.7%	18.1%	13.4%	17.1%	13.7%
Own business	11.8%	2.8%	7.9%	2.7%	4.0%	1.6%
Union apprenticeship	1.3%	0.9%	0.6%	0.9%	0.5%	1.1%
Government training program	1.3%	0.9%	2.9%	0.9%	2.5%	3.3%
Military service	3.4%	5.2%	6.1%	11.6%	5.3%	8.8%

attending a university was the second choice though this choice was more popular among Anglos than Mexican Americans. For all three ethnic groups advanced vocational/technical training was the third choice, but the number making this choice was considerably less than for the first two preferences.

Although it was a minor alternative, it is of interest to note that enlistment in the military still holds some attraction for high school youth--most for Mexican Americans, next for Blacks, least for Anglos. Of least interest to all the students was union apprenticeship. Part of the explanation for this may be the fact that few students had been exposed to unions through family members or other means. Further, when asked directly whether they knew what these programs were, three-fourths of all students responded that they were not familiar with apprenticeship programs. Anglo and Mexican American VE students had somewhat greater knowledge than their Non-VE peers,

but interestingly, Black Non-VE students seemed to know more about apprenticeship programs than Black VE students. Similarly, More than half of all students did not know what kinds of vocational/technical training programs were available in their home cities. Generally, VE students were more aware of these programs than Non-VE students, and Black VE students were the most knowledgeable.

It is obvious from Table 2 that a steady job was the first preference of all VE students, and a university education was the first preference of all Non-VE students. The third choice for all subgroups was still advanced vocational/technical training. For Anglo and Mexican American VE students the distance between the first and second preferences was wide; for Black VE students the two preferences were very close. While the first choice for all Non-VE students was a university education, Anglos and Blacks, in equal percentages, made this choice more often than Mexican Americans (42.3 percent versus 39.3 percent). Among VE students, who chose a steady job as their first alternative, Anglos made this choice most often, Mexican Americans next, and Blacks least. Black VE students chose a university education as their first preference more often than Anglo or Mexican American VE students. It is of interest to note that even among the Non-VE Anglo student there is a preference for post-high alternatives other than a college education.

Understanding that 16 and 17 year olds might be strongly considering more than one single alternative, they were given the chance to rate the same post-high school alternatives as follows: "I want to do this," "I am not sure," and "I don't want to do this." Table 3 presents these responses. This table is actually an expansion of Table 2. It incorporates a measure of acceptance/nonacceptance and of convictions of commitment regarding each of the seven post-high school alternatives.

TABLE 3

Opinions Concerning Post-High School Alternatives of VE and Non-VE Students, by Ethnic Group, in Percentages of Total Responses

Post-High School Alternative	Anglo		Mexican American		Black	
	VE	Non-VE	VE	Non-VE	VE	Non-VE
Steady job						
I want to	74.2%	54.6%	76.0%	67.9%	77.6%	62.2%
I'm not sure	17.8%	33.3%	19.3%	25.0%	16.2%	26.1%
I don't want to	8.1%	12.0%	4.7%	7.1%	6.2%	11.7%
TOTAL RESPONSE	236	216	362	112	419	180
Four-year college						
I want to	27.2%	44.6%	24.0%	38.5%	39.2%	51.4%
I'm not sure	31.5%	20.7%	38.3%	36.7%	35.2%	35.9%
I don't want to	41.4%	34.7%	37.7%	24.8%	25.6%	12.7%
TOTAL RESPONSE	232	213	358	109	406	181
Advanced voc./tech. training						
I want to	20.6%	16.4%	28.2%	18.3%	27.8%	27.0%
I'm not sure	49.4%	40.4%	47.3%	45.2%	41.5%	39.7%
I don't want to	30.0%	43.2%	24.5%	36.5%	30.8%	33.3%
TOTAL RESPONSE	233	213	351	104	400	174
Own business						
I want to	18.8%	11.1%	18.8%	12.1%	15.2%	13.2%
I'm not sure	36.3%	25.9%	33.3%	28.0%	29.4%	32.2%
I don't want to	44.9%	63.0%	47.8%	59.8%	55.4%	54.6%
TOTAL RESPONSE	234	216	345	107	395	174
Union apprenticeship						
I want to	5.2%	2.8%	5.2%	3.8%	4.6%	4.1%
I'm not sure	18.3%	18.7%	32.1%	24.5%	26.9%	34.3%
I don't want to	76.5%	78.5%	62.7%	71.7%	68.5%	61.5%
TOTAL RESPONSE	230	214	346	106	390	169
Gov't. training program						
I want to	6.0%	2.4%	13.1%	13.3%	16.2%	11.0%
I'm not sure	31.9%	29.4%	39.8%	37.1%	35.6%	38.2%
I don't want to	62.1%	68.2%	47.1%	49.5%	48.2%	50.9%
TOTAL RESPONSE	232	211	344	105	388	173
Military service						
I want to	6.5%	6.5%	13.5%	18.1%	11.9%	13.3%
I'm not sure	25.0%	23.3%	33.0%	25.7%	22.3%	17.9%
I don't want to	68.5%	70.2%	53.4%	56.2%	65.7%	68.8%
TOTAL RESPONSE	232	215	348	105	394	173

In analyzing Table 3, the "I want to" response will be considered as indicating definite preference for the alternative. The responses "I want to" and "I'm not sure" will be combined to indicate that an alternative is within the realm of possibility for the student. "I don't want to" indicates rejection of the alternative.

From Table 3 it is apparent that a steady job evoked the strongest definite preference ("I want to") for students of all ethnic groups, VE and Non-VE. Even among Anglo VE students, who might have been expected to show a stronger commitment toward university work, the preference for a steady job was a full ten percentage points greater than the preference for attending a four-year college. When looking at a steady job as a possible preference (i.e., uniting the "I want to" and "I'm not sure" choices and eliminating the outright "I don't want to" choice), it was chosen by nine out of ten students of all ethnic groups. It was most often selected by Mexican American VE students, 95.3 percent and least often by Anglo Non-VE students, 87.9 percent.

In terms of definite preference, a college education was the second choice of all subgroups except Mexican American VE students, where it closely followed advanced vocational/technical training. In all other subgroups advanced vocational/technical training was the third definite preference. When uniting definite and possible choices the same general pattern was observed except for Anglo VE students, who, along with Mexican American VE students, also moved advanced vocational/technical training to second preference ahead of a university education. Whereas, Table 2 indicated that the other alternatives were rarely the students' first preference, Table 3 shows that they were not outside the realm of possibility. About half of all students indicated that they would consider self-employment or a government-sponsored training program,

and about one-third of all students would consider a union apprenticeship program or the military service. Anglo and Mexican American VE students were more inclined than Non-VE to consider opening their own businesses or entering apprenticeship programs. For Blacks, Non-VE students were more likely than VE to consider these alternatives. In all three ethnic groups, VE students were more likely than Non-VE to consider a government training program or the military. Both of these alternatives were generally more appealing to the minority student than to the Anglo.

Job Expectations and Location

All students responding to Form A/B were asked the following question: 'Now, let's imagine that you were going to look for a steady job right after graduation (even if you don't really plan to look for a job). What specific job, or what kind of job, do you think you would get?"

Responses to this item are found in Table 4. This table shows the students' realistic evaluations of how they would fit into the labor market with no further education after high school and with only whatever limited occupational experience they might have at the time of graduation.

The individually named jobs or job types were coded and placed into broad categories of the Dictionary of Occupational Titles (DOT). The 1000 DOT series is inclusive of farm laborers, agricultural employees, farm supervisors, and the like; the 2000 DOT series includes non-farm laborers, operatives, semi-skilled workers, such as bellboys, deliverymen, fishermen, gardeners, gas station attendants, etc.; the 3000 DOT series includes craftsman, skilled workers, minor technical and supervisory personnel, such as longshoremen, mechanics, electricians, shop foremen, etc.; the 4000 DOT series includes higher status, more highly trained technical workers, such as machinists, heavy equipment

operators, bus drivers, etc.; the 5000 DOT series includes supervisory government employees, small business operators, reporters, restaurant managers, retail store managers, etc.; the 6000 DOT series includes non-manual sales and clerical personnel, such as salesclerks, secretaries, office messengers, teaching assistants, telephone operators, etc.; the 7000 DOT series includes professionals and highly educated technicians, such as social workers, nurses, lawyers, physicians, surveyors, photographers, ministers, etc.; the 8000 DOT series includes the glamour and celebrity-type jobs, such as professional athletes, models, actors, authors, musicians, etc.; and the 9000 DOT series includes homemakers-housewives. The DOT system is only approximately a classification by status since, as can be seen, the range of occupations within any series is wide. Roughly speaking, those categorized under 5000 are blue collar workers, those over 5000 are white collar workers.

Looking at Table 4, it can be seen that students, in general, realistically saw themselves fitting into the labor market either in lower blue collar or white collar jobs; i.e., as semi-skilled workers or as office workers and salesclerks. VE students tended to see greater opportunity in the blue collar world, Non-VE students in the white collar world. There are more differences between students in different high school programs (VE/Non-VE) than among ethnic groups. VE students appeared to assume that at least some of their acquired occupational skills and/or their orientations to such skills would have marketability in the trades and crafts; Non-VE students assumed that their lack of occupational skills and/or their acquired social skills would have marketability in the white collar work world.

When students were asked what they thought they might earn in this post-high school job, the average response for all students was $146 per week or $3.65 per hour. Blacks were the most optimistic about potential earnings,

TABLE 4

Expected Job Type Immediately After Graduation for VE and Non-VE Students, by Ethnic Group, in Percentages of Total Responses

DOT Classification of Job Type	Anglo		Mexican American		Black	
	VE N = 232	Non-VE N = 197	VE N = 345	Non-VE N = 107	VE N = 395	Non-VE N = 170
1000 Agricultural operators & managers	0.0%	0.0%	0.0%	0.0%	1.5%	0.0%
2000 Laborers, semi-skilled, operatives	7.3%	14.2%	4.6%	7.5%	9.4%	11.8%
3000 Craftsmen, skilled, minor technical, supervisory	30.6%	13.7%	27.5%	16.8%	24.6%	12.9%
4000 Higher status technical	10.3%	5.6%	12.2%	10.3%	14.7%	8.8%
5000 Small businessmen, management	5.2%	4.1%	4.9%	4.7%	3.3%	5.3%
6000 Non-manual sales clerical	29.7%	45.2%	22.6%	46.7%	23.5%	36.5%
7000 Professionals, highly trained technical	15.5%	13.7%	27.5%	13.1%	19.2%	19.4%
8000 Entertainers, models, musicians athletes	1.3%	3.6%	0.6%	0.9%	3.5%	5.3%
9000 Homemakers	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%

Mexican Americans less, and Anglos least. VE students within each ethnic group expected to make more money than Non-VE students. The expected mean weekly and hourly income for the ethnic groups, by program, were: Anglo VE students, $139, $3.48 per hour; Anglo Non-VE students, $130, $3.25 per hour; Mexican American VE students, $153, $3.83 per hour; Mexican American Non-VE students, $131, $3.28 per hour; Black VE students, $158, $3.95 per hour; and Black Non-VE students, $140, $3.50 per hour. It appears that although the students were realistic in seeing where they might fit into the labor market, they were not so realistic in judging their value to that labor market. The wages they expected were well above those paid to newcomers in lower blue collar or white collar occupations.

Students were also asked where they expected that first post-graduation job to be located. These responses are shown in Table 5. About 80 percent

TABLE 5

Expected Location of First Post-High School Job for VE and Non-VE Students, by Ethnic Group, in Percentages of Total Responses

Expected Location of First Post-High School Job	Anglo		Mexican American		Black	
	VE N = 231	Non-VE N = 209	VE N = 357	Non-VE N = 110	VE N = 432	Non-VE N = 193
In home city	80.5%	76.1%	83.2%	83.6%	77.3%	72.5%
In Texas, close to home	7.8%	11.5%	8.4%	6.4%	9.5%	10.4%
In Texas, far from home	4.8%	2.9%	3.4%	1.8%	3.0%	4.7%
Outside of Texas	6.9%	9.6%	5.0%	8.2%	10.2%	12.4%

felt it would be in their home city, and an additional 10 percent felt it would be close to their home city. There were no major differences in how students responded to this item, although Anglo and Black VE students were more expectant than Non-VE of remaining in their home cities. Slightly more Blacks felt that their first job would be outside of Texas. Mexican Americans--VE and Non-VE--expressed the strongest expectation of remaining in their home cities. Given the fact that this is an urban sample, it is not too surprising to find that most students expect to find their first job in their home city.

Type of College and Location Preferred

Students were asked their preference regarding the type of college or university they would attend and the major field they would choose if they were to attend college. This question was asked of all students, even those who had indicated that they did not plan on college attendance. Of the entire sample, 39.3 percent preferred a large state university, like the University of Texas or the University of Houston; 28.4 percent preferred attending a local junior or community college for the first two years and completing their degree at a university; 22.7 percent preferred a smaller state university, like Stephen F. Austin or Sam Houston State; and only 9.7 percent preferred a private university. More Mexican Americans than Anglos or Blacks were interested in large state universities and in junior colleges. Conversely, more Blacks and Anglos (and more Blacks than Anglos) preferred small state universities and private universities. In all ethnic groups, more VE students than Non-VE students favored the alternative of a junior college first. Considerably more Mexican American Non-VE students (21.1 percent) than Mexican American VE students (13.7 percent) favored small state universities. Among those preferring a large state university there was virtually no difference between VE and Non-VE students within the ethnic groups.

Table 6 reports upon the areas of specialization or major fields which would be selected if students attended a college or university. For the total sample, about 20 percent indicated Other as the major, and this was the first preference. The bulk of these Other responses indicated that their preference was within the health sciences, especially the young women. The next major areas of preference were: the professions, business administration, and technical fields. These three received about half of the total response. Another ten percent chose education. The hard sciences, the social sciences, engineering, and the humanities would not gather too many recruits from our sample.

TABLE 6

Possible Major Field in College for VE and Non-VE Students, by Ethnic Group, in Percentages of Total Responses

Possible Major Field	Anglo		Mexican American		Black	
	VE N = 234	Non-VE N = 214	VE N = 354	Non-VE N = 111	VE N = 427	Non-VE N = 195
Education	7.3%	10.3%	6.8%	24.3%	11.5%	12.8%
Sciences	3.8%	6.5%	2.5%	2.7%	2.8%	3.6%
Engineering	3.8%	8.4%	11.3%	4.5%	4.4%	3.6%
Technical Fields	21.8%	11.2%	28.0%	12.6%	13.8%	9.2%
Social Sciences	2.6%	5.1%	1.4%	4.5%	1.6%	3.6%
Humanities	4.3%	2.3%	1.4%	3.6%	2.8%	2.6%
Business Administration	15.4%	17.8%	17.8%	13.5%	19.2%	17.4%
Professions	13.7%	15.9%	13.0%	23.4%	19.0%	28.2%
Other	27.4%	22.4%	17.8%	10.8%	24.8%	19.0%

As seen in Table 6, Black VE and Non-VE students showed a very similar choice pattern except for the professions, which were more preferred by Non-VE students. Among Anglos and Mexican Americans, however, there are important distinctions between the choice patterns of VE and Non-VE students. Almost twice as many Anglo VE students as Non-VE students would choose technical fields as their major. Although the numbers are small, Anglo Non-VE students tended to have more diverse interests and outnumbered Anglo VE students in most of the minor preferences. Differences between Mexican American VE and Non-VE students are more definite than those found in the other ethnic groups. Mexican American VE students, much more so than their Non-VE counterparts, preferred engineering and technical fields; Non-VE students, on the other hand, indicated more definite options for education and the professions.

Post-Secondary Vocational/Technical Education

When faced with the hypothetical prospect of going on for advanced vocational/technical post-secondary training, Table 7 indicates that more than seven out of ten students preferred public rather than private institutions. First preference for all students was a public technical school or technical institute (42.8 percent), second, a junior or community college (30.5 percent), third, a private technical or trade school (16.7 percent), and last, a private business college (10.0 percent). The differences in choices among the public institutions were minimal among ethnic groups and between programs. VE students, more than Non-VE students, preferred private technical schools while Non-VE students, more than VE students, preferred business colleges.

TABLE 7

Type Institution for Advanced Vocational/Technical Training Chosen by VE and Non-VE Students, by Ethnic Group, in Percentages of Total Responses

Preferred Type Institution	Anglo		Mexican American		Black	
	VE N = 234	Non-VE N = 215	VE N = 366	Non-VE N = 114	VE N = 428	Non-VE N = 195
Junior college	27.4%	30.7%	34.4%	34.2%	28.7%	28.7%
Public technical school	45.3%	40.0%	45.4%	36.0%	41.6%	44.6%
Private technical school	20.1%	17.7%	13.9%	11.4%	19.4%	13.8%
Private business college	7.3%	11.6%	6.3%	18.4%	10.3%	12.8%

The previously noted interest on the part of students in health service careers in university education became highly observable when students were asked about their preferred specialization in post-secondary vocational/technical training. Their responses are found in Table 8. Thirteen program-types plus a residual Other category were presented to the student for selection. Three programs stand out as being most preferred by all students: health care, including nursing and medical technology (16.4 percent); business, including bookkeeping, secretarial work, office management (16.0 percent); and data processing, including a range from programming and keypunching to computer repair (12.3 percent). Blacks, more than the other ethnic groups, preferred health care and data processing; Anglos more strongly preferred business. In general, there tended to be more differences of consequence in the choice patterns within the ethnic groups than among them. Within the Anglo group, VE students preferred health care first, business second, and auto mechanics third; Non-VE students reversed the order of the first two choices, and selected airline jobs as a third

TABLE 8

Preferred Programs in Advanced Vocational/Technical Training for VE and Non-VE Students, by Ethnic Group, in Percentages of Total Responses

Preferred Program	Anglo		Mexican American		Black	
	VE N = 242	Non-VE N = 205	VE N = 360	Non-VE N = 110	VE N = 410	Non-VE N = 188
Agriculture	2.9%	2.4%	2.5%	2.7%	0.7%	1.1%
Air conditioning, refrigeration	3.7%	2.4%	4.4%	3.6%	2.2%	3.2%
Airline job	6.6%	11.2%	4.2%	5.5%	6.8%	5.3%
Auto mechanics, paint and body	14.9%	8.3%	10.3%	9.1%	6.6%	5.9%
Building and construction	6.2%	5.4%	4.7%	3.6%	2.0%	1.6%
Business	14.9%	22.0%	12.8%	20.9%	14.6%	17.6%
Cosmetology	0.8%	1.0%	2.8%	1.8%	6.6%	1.6%
Data processing	7.9%	8.3%	11.7%	12.7%	16.8%	13.8%
Drafting	3.3%	4.4%	15.6%	5.5%	3.9%	3.7%
Health care	16.1%	14.6%	11.4%	18.2%	17.6%	25.0%
Home economics	6.6%	5.8%	0.6%	2.7%	4.6%	3.7%
Modeling	0.8%	2.9%	1.1%	5.5%	9.5%	9.6%
Radio, TV repair	1.2%	1.5%	3.6%	1.8%	3.4%	3.7%
Other	14.0%	5.9%	14.4%	6.4%	4.6%	4.3%

choice. Within the Black group both VE and Non-VE students selected health care first, VE students then preferred data processing and business while Non-VE students reversed the order of these latter choices. Mexican American Non-VE students stuck to the major choices: business, health care, and data processing, in that order. But Mexican American VE students showed a very distinct choice pattern: drafting was first, business second, and data processing third. Also, Mexican American VE students chose the Other category much more than Black VE students and slightly more than Anglo VE students. This could indicate that Mexican American and Anglo VE students are interested in courses other than the ones in which they are presently enrolled in high school.

It will be recalled that when dealing with possible jobs after graduation, students were asked where they expected these jobs would be located. Students were asked the same question about possible post-secondary education and training. Table 9 shows the students' preferred locations for this education.

TABLE 9

Preferred Location of Post-Secondary Educational Institution by VE and Non-VE Students, by Ethnic Group, in Percentages of Total Responses

Preferred Location of Educational Institution	Anglo		Mexican American		Black	
	VE N = 238	Non-VE N = 215	VE N = 366	Non-VE N = 114	VE N = 435	Non-VE N = 197
In home city	41.2%	35.3%	54.6%	43.9%	32.6%	31.5%
In Texas, close to home	25.2%	38.6%	25.1%	21.9%	27.8%	27.4%
In Texas, far from home	13.9%	9.3%	8.7%	12.3%	12.0%	12.2%
Outside of Texas	19.7%	16.7%	11.5%	21.9%	27.6%	28.9%

As can be seen in the table, the tendency was for students to prefer such an educational institution to be in their home city; Mexican Americans were more strongly inclined in this manner than Anglos or Blacks. Least among Blacks, most among Mexican Americans, VE students were more home city oriented than Non-VE students. When the "In home city" responses were combined with the response "In Texas, but close to home" it is noted that 76.5 percent of the Mexican American students, 70.0 percent of the Anglo students, and 60.0 percent of the Black students preferred to get further schooling close to their home cities. When analyzed by sub-groups, Mexican American VE students appeared to be the most home city bound (81.5 percent), much more so than Mexican American Non-VE students (65.8 percent). Within the Black group there was

almost no difference in location preference by program. Within the Anglo group, VE students preferred their home city, and Non-VE students preferred to remain close to their home city. With little difference by program Black students are those who most prefer to leave the state for educational purposes, Mexican American students those who least prefer to do so.

Most Desired Educational Objective

Limiting aspirations only to education, students were asked to select their most desired alternative "if you could have as much schooling as you desired." Their responses are found in Table 10. Almost all rejected the

TABLE 10

Most Desired Educational Objective for VE and Non-VE Students, by Ethnic Group, in Percentages of Total Responses

Most Desired Educational Objective	Anglo		Mexican American		Black	
	VE N = 245	Non-VE N = 217	VE N = 363	Non-VE N = 116	VE N = 432	Non-VE N = 197
Never go to school again	2.9%	2.8%	2.8%	0.9%	1.4%	0.5%
Complete high school	25.3%	15.2%	27.3%	18.1%	17.6%	17.3%
Complete post-high school technical program	24.1%	17.1%	25.6%	19.8%	18.3%	17.3%
Junior or community college	12.7%	11.1%	12.9%	12.9%	19.0%	8.6%
Four-year college or university	20.8%	35.5%	23.4%	38.8%	31.5%	36.0%
Graduate or professional studies	14.3%	18.4%	8.0%	9.5%	12.3%	20.3%

idea of leaving school; i.e., "never going to school again." For all students the strongest response was to graduate from a four-year college or university (29.7 percent). Completing high school and a post-secondary vocational/technical

program were second choices both being selected by 20.7 percent of all students. The options of getting a two-year junior college degree and of doing post-university graduate or professional work were less preferred and about equally chosen (13.7 percent and 13.2 percent, respectively). There were some significant differences in the choice patterns by ethnic group. Mexican American students were more inclined to want to complete high school or a post-secondary vocational/technical program than were Anglo and Black students. Black students preferred graduation from college or from a junior college more than did Anglo and Mexican American students. Black and Anglo students were more inclined to prefer graduate studies than Mexican American students. By ethnic group, the highest educational aspirations appear to be characteristic of Black students, the lowest of Mexican American students.

Within the ethnic groups, Anglo and Mexican American Non-VE students expressed their first educational preference as graduation from college, VE students as graduation from high school closely followed by completion of a post-secondary vocational/technical program. In the Black group, college graduation was the first preference of both VE and Non-VE students.

Marriage as a Career Alternative

About two out of ten students expected to marry within a year after graduation from high school, most of them female students. Mexican American students were more inclined to marriage after graduation than were Anglo or Black students. Marriage, of course, could be an alternative to a career for young women and, in times past, has been an extremely important post-secondary possibility. To find out the students' concepts of the role of the married graduate, they were asked which of several alternatives they would find most acceptable for "young married women who are recent high school

graduates." Their answers are given in Table 11. The modal response (37.4 percent) for all students was that these young women should work part-time and do their best to take care of their homes. After this response,

TABLE 11

Preferred Alternative for Recently Graduated Female Students, VE and Non-VE Students, by Ethnic Group, in Percentages of Total Responses

Preferred Alternative	Anglo		Mexican American		Black	
	VE N = 238	Non-VE N = 211	VE N = 344	Non-VE N = 110	VE N = 428	Non-VE N = 192
Stay at home, care for home and family	26.9%	27.0%	35.5%	27.3%	22.4%	15.1%
Work part-time, care for home as possible	35.7%	33.2%	40.1%	38.2%	37.6%	38.5%
Work full-time, share home chores with husband	25.2%	22.7%	19.5%	29.1%	24.2%	33.3%
Other	12.2%	17.1%	4.9%	5.5%	5.6%	13.0%

students indicated that young married women should work full-time and share household chores with their husbands (27.4 percent) or that they should not work and stay at home and take care of their home and family (26.3 percent). A few (9.0 percent) presented other alternative arrangements. Mexican American students appeared to be more conservative in this regard than students of other ethnic groups; Blacks were most liberal, Anglos most innovative (i.e., 14.5 percent presented alternative arrangements). Of all sub-groups, Mexican American VE students most strongly supported the stay-at-home image (35.5 percent); Black Non-VE students supported it least (15.1 percent). In regards to alternative arrangements, Anglo Non-VE students were most supportive (17.1 percent), Mexican American VE students least supportive (4.9 percent).

Future Ideal/Expected Jobs

Students were requested to name the type of job or work that they most desired as a lifetime endeavor. These lifetime ideal jobs were summarized

TABLE 12

Ideal Future Job Type,
VE and Non-VE Students, by Ethnic Group,
in Percentages of Total Responses

DOT Classification of Job Type	Anglo		Mexican American		Black	
	VE N = 221	Non-VE N = 201	VE N = 324	Non-VE N = 108	VE N = 395	Non-VE N = 183
1000 Agricultural operators and managers	0.5%	0.5%	0.9%	0.0%	0.8%	0.0%
2000 Laborers, semi-skilled, operatives	4.1%	4.5%	2.8%	0.9%	5.1%	4.4%
3000 Craftsmen, skilled, minor technical, supervisory	23.1%	9.0%	19.8%	14.8%	11.6%	7.7%
4000 Higher status technical	7.7%	3.5%	8.0%	7.4%	15.2%	6.6%
5000 Small businessmen, management	6.8%	7.5%	8.3%	9.3%	6.8%	9.8%
6000 Non-manual sales, clerical	10.4%	14.4%	11.4%	18.5%	11.9%	12.0%
7000 Professionals, highly trained technical	43.0%	50.7%	44.4%	43.5%	39.0%	46.4%
8000 Entertainers, models, musicians, athletes	4.1%	9.0%	4.3%	5.6%	9.6%	12.6%
9000 Homemakers	0.5%	1.0%	0.0%	0.0%	0.0%	0.5%

into broad DOT categories as shown in Table 12. The DOT series which encompassed 43.8 percent of all responses was that of professionals and highly trained technical workers (7000). This preference was the same for all students although the strength of the preference was greatest for Anglo students (46.7 percent), next for Mexican American students (44.2 percent), last for Black students (41.4 percent). No other category approached the magnitude of responses found in the 7000 series. For Anglo and Mexican American VE students the second priority was the craftsman series, the 3000's. Among Black VE students the 3000's were almost equal to the 6000 series, non-manual sales/clerical. For Anglo and Mexican American Non-VE students the non-manual sales/clerical series also appeared as a weak second preference; for Black Non-VE students it was almost identical with the 8000 series made up of the glamorous/celebrity jobs. The least attractive alternatives for every sub-group were those in the 1000 series, agricultural work, and in the 9000 series, homemakers.

Students were asked why they wanted their ideal jobs. They were presented a list of ten reasons (plus Other category) of which they could check as many or as few as applied to them. Table 13 shows the response to each of these reasons. In responding to this question, most students checked more than one reason.

From Table 13 it is obvious that "a job pays good money" was, by far, the most important reason for its selection. All ethnic groups and all program sub-groups, except Anglo Non-VE students who equally chose exciting work, placed first priority on monetary rewards. The fact that the ideal job is exciting and that, through such a job, one might help other people were the second and third priorities. Beyond this point there was a marked diversity of responses by sub-groups.

TABLE 13

Reasons for Wanting Ideal Job
VE and Non-VE Students, by Ethnic Group,
in Percentages of Total Respondents*

Reasons for Wanting Ideal Jobs	Anglo		Mexican American		Black	
	VE N = 250	Non-VE N = 220	VE N = 373	Non-VE N = 117	VE N = 444	Non-VE N = 201
This is an important job	13.6%	21.4%	22.5%	18.8%	20.1%	18.4%
It pays good money	46.4%	43.6%	42.9%	43.6%	50.5%	46.3%
Other people will look up to me	8.8%	5.5%	9.1%	8.6%	6.8%	7.0%
It matches my abilities	32.0%	26.8%	20.9%	15.4%	23.7%	17.4%
I can be my own boss	17.2%	10.9%	8.9%	6.8%	5.9%	8.0%
I know a lot about it	21.2%	14.6%	16.1%	12.0%	11.9%	10.5%
It offers security	9.2%	11.8%	7.2%	6.0%	7.9%	6.0%
My parents want me to	4.4%	2.7%	1.9%	3.4%	3.2%	5.5%
It is exciting work	43.2%	43.6%	28.4%	35.0%	30.0%	25.4%
I can help other people	31.6%	36.8%	25.5%	35.0%	32.0%	35.8%
Other reasons	16.4%	22.7%	11.0%	13.7%	7.4%	8.5%

*Appreciation is expressed to Dr. William P. Kuvlesky of Texas A & M University for his permission to use items and scales analyzed in Tables 12, 13, 14, and 20 of this report. These same items were utilized in previous surveys conducted by the Center for Human Resources. Dr. Kuvlesky has also provided project staff with many helpful suggestions and ideas during the course of these studies.

After having mentioned what one's ideal job might be and the reasons for its selection, the student was told, "Sometimes we are not always able to do what we want most. What kind of job do you <u>really</u> expect to have most of your life?" The responses to this question are found in Table 14. This table is directly comparable to Table 12 and, through comparison, it may be seen that students become more realistic when choosing their expected rather than their ideal job. The most apparent change is in the professional DOT category, the 7000 series. Losses in this and the glamorous/celebrity 8000 series are generally absorbed into non-manual sales and clerical work, homemaking, and, to some degree, the crafts, skilled, and minor technical category. Although the professional jobs diminish in importance, they still appear in all but one sub-group, as the area in which the largest number of students expect to find their lifetime work. Even though the responses given in Table 14 are less optimistic than those presented in Table 12, they are still not entirely realistic, especially considering that these responses reflect choices made by students from low socioeconomic backgrounds. It is highly unlikely that 36.1 percent of Black students, 30.5 percent of Mexican American students, or even 27.8 percent of Anglo students (who, under present circumstances, would be the most likely to "make it" in our society) would be able to complete graduate or professional post-university programs. There are, of course, some mitigating factors. The 7000 series is quite broad and includes some occupations that do not require professional education. There may be some confusion in the minds of students who state that they wish to become nurses but, in reality, are thinking of becoming lesser medical paraprofessionals. Indeed, our sample may be exceedingly highly motivated and talented. The mitigating factors notwithstanding, there appears to be a sense of unreality in the life-career expectations of these students. This

TABLE 14

Expected Future Job Type
VE and Non-VE Students, by Ethnic Group,
in Percentages of Total Responses

DOT Classification of Job Type	Anglo		Mexican American		Black	
	VE N = 199	Non-VE N = 172	VE N = 305	Non-VE N = 95	VE N = 354	Non-VE N = 161
1000 Agricultural operators and managers	0.5%	0.0%	1.0%	0.0%	1.4%	0.0%
2000 Laborers, semi-skilled, operatives	6.0%	5.8%	3.0%	2.1%	5.1%	6.2%
3000 Craftsmen, skilled, minor technical, supervisory	25.6%	10.5%	22.6%	13.7%	17.8%	11.2%
4000 Higher status technical	11.1%	2.9%	10.8%	4.2%	13.3%	9.3%
5000 Small businessmen, management	5.5%	5.8%	5.9%	8.4%	4.5%	3.7%
6000 Non-manual sales, clerical	19.1%	28.5%	20.7%	30.5%	18.1%	18.0%
7000 Professionals, highly trained technical	23.6%	32.6%	30.5%	30.5%	33.9%	41.0%
8000 Entertainers, models, musicians, athletes	1.0%	3.5%	2.3%	5.3%	3.7%	8.7%
9000 Homemakers	7.5%	10.5%	3.3%	5.3%	2.3%	1.9%

is especially true when one compares these responses to those summarized in Table 3 where the pragmatic attractiveness of a steady job immediately after graduation looms mightily over other alternatives. It is difficult to imagine large numbers of students ending up with professional occupations after having taken the option of a steady job immediately after high school. Only in rare instances can it, or does it, work out this way.

School, Work, and Life in General

A section of Form A/B was devoted to 34 additudinal items dealing with school, work, and life in general. Each item was scored on a scale ranging from one to four with "1" indicating strong agreement and "4" indicating strong disagreement. There were 17 items dealing with schoolwork, especially vocational education, 12 with success and the world of work, three with the role of women, and two with familial and social relationships. These are synthesized and described below.

There was agreement that all students should take some vocational education while in high school, and that vocational education, in general, was a good idea. Anglo students were somewhat less supportive of the statements than the others, and VE students much more supportive of these than Non-VE students. All students felt that vocational education helps assure a job after graduation, again with Anglo students and Non-VE students generally not as supportive as others. There was general disagreement with the idea that vocational education was a way of getting out of uninteresting courses, with Non-VE students disagreeing somewhat less than VE students. Mexican American and Black students more than Anglo students felt that vocational education would be a first step towards a successful adult life, and VE

students were more strongly in agreement with this than Non-VE students. That vocational education provided skills for later use was more strongly supported by minority and VE students. Vocational training after high school was agreed to be a good idea by all students, especially those not now enrolled in VE programs.

Minority students, especially Blacks, and Non-VE students in general were most positive that education was the best way to get ahead in life. There was agreement, too, that competition in school work made one a better student. This was more strongly supported by minority students than by Anglo students. Most students expressed a liking for school, the idea more strongly endorsed by minority students.

Considerably fewer Mexican Americans than either Anglos or Blacks indicated that, at times, they felt like dropping out of school. This is an interesting reaction since Mexican Americans have the highest school dropout rate in Texas. They leave school, however, well before their high school experience, and this small ethnic sub-sample may indicate that, once a critical period has been met and overcome, the desire is strong to"stick it out."

Students were asked if VE students were different--however that might be interpreted--from other students in high school. Although generally the students disagreed with this idea, in each ethnic group VE students had disagreed less than Non-VE students; i.e., VE students saw themselves as somewhat more different than Non-VE students saw them.

Several of these items inquired into the possible functions of a high school. Although there were differences in magnitude by ethnic group and program, all students supported the idea that high schools should be multi-functional, preparing their students for further education at either a

post-secondary vocational/technical or university level as well as for making a living in the world of work through the provision of both general and special occupational skills.

All students quite strongly supported the fact that they must plan for their future. Minority students more than Anglo students felt that it was more important at this time to continue with school than to work, and Non-VE students supported this more than VE students. All students generally agreed that people should work for what they get in life. There was general strong agreement that it is important to "get ahead in life." Black students were most positive in this regard, Mexican Americans next, and Anglos least.

Students were in agreement that success is better measured by being satisfied and happy with one's job than just by making a lot of money. This is a seeming contradiction to what students previously noted as the principal attraction of their ideal job. Essentially, money-making is not rejected, it is here placed in perspective. Its value is diminished if it is not accompanied by satisfaction and happiness. The same optimism evidenced earlier is seen in responses to items which indicate that one's chances of "making it" in life and getting a good job are good. Students generally agreed that they could do both. Most students stated that they enjoyed working, Mexican American students seeming to enjoy the prospect a bit more than Anglo and Black students. Minority students more than Anglos felt that work is unavoidable, Black students especially seeing it as the only way to advance in life. There is more definite agreement by Black and Anglo students than by Mexican American students that one's success in life should be measured not only by what he achieves in education, but by what he does on his own.

Minority students more than Anglo students were in strong agreement that their families were very important to them. All students felt that people should live and work close to family, relatives, and friends, with Mexican American students somewhat more positive about this than other students.

Black students more than Anglo or Mexican American students, Non-VE students more than VE students, supported the idea that young married women who are high school graduates should be encouraged to continue their education. Minority students as well as Anglo students rejected the idea that a high school education or less is enough for girls because their future is marriage, but Anglos were more definite in their rejection. The idea that girls should not be encouraged to work was also rejected by all students, but Mexican American students were not as enthusiastic in their rejection as were students of the other ethnic groups.

Parents and School

Students were asked to respond "yes" or "no" to six statements concerning their parents' attitudes toward school. These included their parents' preference for college versus a job, encouragement to stay in school, assistance with and discussion of school work, knowledge of school, and participation in school activities. According to the students, Black parents were more supportive of a college-bound orientation than either Anglo or Mexican American parents. Among Anglos, Non-VE students' parents were very much more inclined toward college preparation than parents of VE students. Parents of all students encouraged them to stay in school. Black parents appeared to know more about their schools than did Anglo, and especially more than Mexican American. Black parents also talked to their children about their school work more than did parents of other students. Anglo VE students' parents were less inclined to talk about school work with their children than were those of Anglo Non-VE students.

Parents generally did not help their children with their school work, and this was more characteristic of parents of VE students than those of Non-VE students. Those who helped least were parents of Mexican American students, and this was hardly surprising since their educational backgrounds were so limited that they could not have been of much assistance even if they wanted to. In many instances Mexican American students had already achieved twice the schooling their parents had. Parents were generally not active in school activities. The least active parent group was that of Anglo VE students (13.8 percent), the most active that of Black Non-VE students (27.7 percent). More Black parents belonged to or attended PTA meetings than those of the other ethnic groups, and parents of Non-VE students were more participating than those of VE students. The distinction between parents' participation is most marked in the Anglo group: Non-VE parents had the highest rate of PTA participation of all sub-groups (42.5 percent), VE parents the lowest (23.4 percent). This is indicative of the fact that many of the VE students come from low socioeconomic backgrounds and persons coming from such an environment tend to participate less in school related activities.

In interviewing Black and Mexican American parents whose children were enrolled in secondary VE programs, it was found that although they expressed much interest in their children's school activities, their actual school participation and involvement was low.* Mexican American parents appeared to be hindered more by language difficulties and educational deficiencies. Black parents seemed to participate less because of time and financial constraints; i.e., holding down two jobs, mother working, etc.

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*Mexican American Youth and Vocational Education in Texas (1973) and Black Youth and Occupational Education in Texas (1974) both published by the Center for Human Resources, University of Houston.

Jobs and Careers

Students were presented with a list of problems which usually face individuals when they are job-hunting. They were asked to indicate the degree of difficulty they felt they would encounter with each one of the problems and rate them according to a three point scale: 1 meant that they felt they would have "no trouble at all" with the problem, 2 that they would have "some trouble," and 3 that they would have "a lot of trouble." For each problem the scale scores were summed and divided by the number of students responding producing an arithmetic mean. A mean close to 1.00 would indicate that, on the average, students saw little difficulty with the problem and a mean close to 3.00 would indicate that the problem was, indeed, seen as difficult. The mean scores of students by ethnic group and program for each problem are presented in Table 15.

As seen in Table 15 no problem was thought to be of extreme difficulty for any of the subgroups. The two problems which were admittedly "somewhat" troublesome were the lack of work experience and the lack of occupational skills, and these were more troublesome for Non-VE students than for VE students. The least troublesome areas for all students were filling out applications and dressing correctly; Anglo and Black students were more secure in these areas than Mexican American students. Black VE students were especially confident of knowing how to dress correctly when looking for a job.* All other problems fringed on the "somewhat" troublesome category.

As Table 15 is reviewed, it becomes clear that Anglo students rather consistently felt that they faced less difficulty in these problem areas than did minority students. Although still on the borders of "some trouble,"

*When interviewing employers, one of the major problems they felt Blacks had was not knowing how to dress appropriately for a job. They also felt that most young people needed more pre-employment skills experience and that this experience should be provided at the high school level.

TABLE 15

VE and Non-VE Students' Degree of Difficulty Expected in Job Hunting Factors, by Ethnic Group (1=No Trouble; 2=Some Trouble; 3=Lot of Trouble)*

Job Hunting Factors	Anglo		Mexican American		Black	
	VE	Non-VE	VE	Non-VE	VE	Non-VE
Filling out applications	1.39	1.29	1.45	1.43	1.30	1.36
Interviewing for a job	1.47	1.52	1.56	1.55	1.47	1.49
Difficulty in expressing myself well	1.68	1.71	1.76	1.66	1.62	1.63
Knowing how to dress	1.21	1.23	1.22	1.23	1.12	1.16
Presenting or selling myself to employers	1.65	1.71	1.76	1.77	1.66	1.71
Having no work experience	1.77	1.91	1.73	1.95	1.86	1.93
Having no skill(s)	1.64	1.83	1.75	1.94	1.77	1.87
Getting around (transportation)	1.37	1.44	1.54	1.56	1.64	1.60
Being a member of a minority group	1.47	1.38	1.54	1.57	1.66	1.66
Knowing where to get information on jobs	1.67	1.76	1.77	1.76	1.69	1.69
Not being old enough	1.60	1.58	1.63	1.68	1.75	1.78
Not knowing what a job is all about	1.62	1.65	1.71	1.68	1.59	1.65

*Numbers in table represent mean values.

Black students evidenced greater concern than others regarding their ability to manage the transportation necessary in seeking a job, the fact that they faced an age barrier (being too young), their lack of experience, and their minority identity. Mexican Americans more than others were somewhat more apprehensive about filling out applications, interviewing for a job, selling themselves to employers, lacking occupational skills, knowing where to get information on jobs, and knowing the requirements of jobs. General patterns which emerge from examination of the data in the table would indicate greatest assurance in job-hunting in Anglo students, some apprehension on the part of Mexican American students regarding ability to understand and communicate effectively, and some apprehension on the part of Black students regarding factors tangential to the specifics of the interview situation.

Besides those statements listed in Table 15, students were also asked to rank (on an identical three point scale) the importance of nine other job-related topics. These included knowing how to get a job, where to look for a job, and what jobs are available. Also included were knowing what to expect in the world of work, understanding the problems others face while looking for work, knowing what kind of education and training jobs require, knowing more about different jobs, finding out more about oneself and finding out how school work can relate to a job.

All students were in agreement that it is most important to know how and where to seek employment. Anglos, more than Mexican Americans and Blacks, were emphatic about evaluating the availability of jobs although all subgroups considered this to be important. Also considered of importance by all students were knowing what to expect in the world of work, knowing the training or educational requirements of jobs, having good occupational information, knowing their own capacities to fit into available jobs, and to

see how their school work may help them in their future jobs or careers. Somewhat important to all students was to understand the problems other people may have in looking for jobs. Mexican American students more than Anglos or Blacks emphasized the importance of understanding the problems of others and of establishing a relationship between school work and future jobs. VE students of all ethnic groups tended to emphasize to a greater degree than Non-VE students the importance of knowing how to get a job. This may indicate the VE students greater exposure to the labor market through his part-time job and a more realistic appraisal of job-related problems.

Students were asked to define how helpful others were in discussing aspects of job hunting with them while they were in school. The scale values of responses--1 for "very helpful," 2 for "helped a little bit," and 3 for "did not help at all"--were averaged as in Table 15, and the results are presented in Table 16. Immediately apparent is that none of the persons listed were extremely helpful; all fell either in the positive or negative side of "helped a little bit." Students' parents came the closest to having been very helpful, especially those of Black students. Vocational education teachers were consistently more helpful to VE students than to Non-VE students.* Regular and vocational school counselors appear to have helped Anglo students least. None of the others--adult friends, school friends, relatives other than parents, and out-of-school career counselors--were of great help to either VE or Non-VE students.

After having responded to a fairly large number of items dealing with job and career topics, students were asked if such things should be discussed in a special course while they were still in high school, and nine out of ten students, with little variation by ethnic group or program, responded "yes."

*As in previous studies conducted by the Center for Human Resources vocational teachers appear to be more helpful to the VE student than any other school-related person. VE teachers have small groups and more time and thus are able to work with their students on a one-to-one ratio.

TABLE 16

The Value of Discussions With Individuals About The World of Work for VE and Non-VE Students, by Ethnic Group (1=Very Helpful, 2=Helped a Little Bit, 3=Did Not Help at All)*

Individual	Anglo		Mexican American		Black	
	VE	Non-VE	VE	Non-VE	VE	Non-VE
Regular or academic school counselor	2.17	2.06	1.87	1.90	1.75	1.72
Vocational counselor	2.04	2.46	1.91	2.14	1.80	2.22
Regular teacher(s)	2.03	1.91	1.85	1.88	1.88	1.82
Vocational education teacher(s)	1.79	2.55	1.66	2.20	1.71	2.22
Adult friend(s)	1.74	1.66	1.78	1.63	1.79	1.70
School friend(s)	1.91	1.86	1.88	1.75	1.94	1.87
Parents	1.64	1.53	1.54	1.44	1.44	1.40
Brother, sister, other relatives	2.17	2.03	1.89	1.79	1.89	1.79
Non-school career counselor	2.34	2.46	1.91	2.02	1.85	1.93

*Numbers in table represent mean values.

When asked if they would be interested in participating in such a course, if available, a similar number answered "yes." In this latter response minority students, perhaps sensing more of a need, were more emphatic than Anglo students. Employers, community informants, and school personnel interviewed strongly endorsed such a course while the student was still in high school. Employers particularly were acutely aware of the job problems that young people encountered and they were more adamant about the schools providing pre-employment skills training, especially in the area of "human relations."

School Work and Working After School

When asked if they knew what kinds of VE programs were available in their schools, two-thirds of all students replied that they knew of some,

but not all, of the available programs. As might have been expected, VE students knew considerably more about such programs than Non-VE students. Less than one-third of all students indicated that there were some VE programs in their school about which they would like more information; those who most desired such information were Mexican American and Black VE students. The type programs most frequently mentioned in this regard were in health occupations. When asked if there were vocational programs not available in their home schools in which they might enroll if made available, 23.5 percent of all students responded affirmatively. Non-VE students were more emphatic about this than VE students, especially Black Non-VE students (30.8 percent). The areas of greatest interest in this regard were health occupations and home economics. This observation--that more than a quarter of the Non-VE students in our sample would be interested in participating in VE programs of specific interest to them if they were available--indicates that the pool of possible VE enrollees may be greater than those currently participating in VE programs.

VE students more than Non-VE students mentioned that their schools helped them, or would help them, in getting jobs. Significantly more Anglo and Black VE students than Non-VE students stated that there were vocational counselors in their schools, and interestingly, more Non-VE than VE Mexican American students indicated the availability of such counselors.

TABLE 17

Type of Student Best Suited for Vocational Education
by VE and Non-VE Students, by Ethnic Group,
in Percentages of Total Responses

Type Student	Anglo		Mexican American		Black	
	VE N = 250	Non-VE N = 220	VE N = 373	Non-VE N = 117	VE N = 444	Non-VE N = 201
Has to make a living after graduation	81.2%	87.3%	73.2%	75.2%	68.0%	71.1%
Can't do well in an academic program	47.2%	56.4%	30.3%	40.2%	34.9%	34.8%
very bright	29.2%	19.6%	30.6%	24.8%	30.2%	22.4%
Interested in real things, not just books	64.4%	47.3%	57.1%	51.3%	52.0%	46.8%
From minority group	34.0%	30.0%	38.3%	37.6%	39.6%	36.8%
Practical	48.8%	41.8%	32.4%	31.6%	26.6%	28.4%
Can't make it in college because he is poor	57.6%	63.6%	46.9%	47.0%	52.7%	53.7%
Doesn't really care about school	32.0%	42.7%	20.6%	29.1%	28.4%	32.3%

Student Best Suited for Vocational Education

Students were asked, "For which type of high school students do you think that vocational education programs are the best?" Their answers are found in Table 17. Without doubt, all students overwhelmingly felt that the primary type for VE programs is the student who has to make a living after he graduates from high school. After this, students varied in their opinions about the best type of student for VE programs, although there was relative agreement that he would not be the very bright student. VE and Non-VE students tended to rank relatively highly, but in different order, the student who is reality-oriented and the student who can't make it in college because

he is poor. Generally Non-VE students more than VE students emphasized the fact that the best student for VE programs is the student who can't do well in academic programs. Anglo students were more definite than Black or Mexican American students that he is one who must make a living, one who cannot do well in an academic program, one who is reality-oriented and practical, and one who cannot go to college because of financial difficulties. Both Black and Mexican American students more strongly than Anglo students noted that he would be from a minority group. VE students of all ethnic groups were less prone than Non-VE students to dismiss the very bright student as the best type of student for VE programs.

Extracurricular Activities and Jobs

Extracurricular participation in clubs, class activities, or other school activities was more characteristic of Non-VE than VE students and of Anglo and Black students more than Mexican American students. Almost a quarter of all Mexican American students had never participated in such activities while nearly a third of Anglo Non-VE students had participated in three or more. Those VE students that were in some kind of club mostly belonged to a vocational organization such as the Distributive Education Club of America (D.E.C.A.) or the Vocational Industrial Clubs of America (V.I.C.A.). Many VE students, however, find it difficult to participate in extracurricular activities because they often work both during and after school hours. Also, many VE students come from low income families where supplemental sources of income are often a necessity.

About four in ten students held out-of-school jobs at the time of this survey, VE students much more than Non-VE students. Anglo students were most often employed. The rates of out-of-school employment were: Anglo VE students, 64.4 percent; Anglo Non-VE students, 39.8 percent; Mexican American VE students, 47.8 percent; Mexican American Non-VE students, 33.0 percent; Black VE students, 40.5 percent and Black Non-VE students, 25.8 percent. It should be noted that some of the employment of VE students is directly associated with their VE programs at school, and, although they receive compensation for their work, it is a required component in their training for which they earn academic credit. As can be expected, the majority of jobs held by students were lower blue-collar and white-collar jobs; i.e., sales clerks in retail stores, typists, receptionists and secretaries in office work, cashiers and stockboys in grocery stores, nurses aides, recreational aides, and other unskilled and semiskilled jobs which are traditionally held by teenagers.

The students who held jobs were asked if anyone had helped them get the job. Over 70 percent reported that they had received assistance in finding these jobs. Those who had been most helpful were academic teachers, academic counselors, siblings and relatives other than parents, persons who came to school to speak on careers and community or neighborhood centers. Of special help to VE students, but of little help to Non-VE students, were vocational counselors and especially vocational education teachers. (It bears mention, however, that vocational education teachers were helpful in placing 8.3 percent of Anglo Non-VE students, 7.9 percent of Black Non-VE students, and 3.4 percent of Mexican American Non-VE students.) Adult friends and friends at school were more helpful to Non-VE than to VE students. Parents were especially helpful to Black and Anglo Non-VE students.

Possibility of Migration

Regardless of what specific plans students in our sample may have had regarding their alternatives after graduation, they were asked to imagine that they would be looking for a job. If this were the case, they were asked, "Would you move away from your home town to look for a job somewhere else?" Two-thirds of the students answered "no" with no significant difference in this response by either ethnic group or program. This reluctance to migrate may be explained by the fact that this was largely an urban sample. Students in urban areas probably do not feel any need to move to find jobs.

Even though students indicated a reluctance to move out of their home towns, all were given a list of factors and asked to check all those which might influence them to move in the future. Students could check more than one factor. These responses are given in Table 18.

For all students the reasons most frequently cited refer to the lack of economic possibilities in home communities. Approximately one-third of the students felt that "jobs around here just don't pay enough" and that "there really are very few jobs around here" would be reasons to leave. Another one-quarter would leave because someone with just a high school diploma had "no real future here" and local jobs would not allow for advancement. Although only 10.9 percent of all students noted that there was "no chance for a woman to get a good job here," it must be remembered that only female students could select this as a choice. Since about half of all respondents were female, this must be listed as a major reason for possible migration for young women (in reality, about 22.0 percent of female students checked this reason). The personal reasons for possible migration play only a small part in the overall picture: wishing to leave "the people around here," family friends and romantic partners.

TABLE 18

Possible Reasons for Out-Migration
VE and Non-VE Students, by Ethnic Group,
in Percentages of Total Respondents

Reasons for Out-Migration	Anglo		Mexican American		Black	
	VE N = 250	Non-VE N = 220	VE N = 373	Non-VE N = 117	VE N = 444	Non-VE N = 201
No real future for high school graduates	11.6%	14.1%	22.3%	21.4%	24.6%	26.4%
Local jobs would not allow advancement	16.4%	19.6%	20.4%	22.2%	21.6%	20.4%
Very few jobs	17.2%	21.4%	27.1%	29.1%	29.3%	30.9%
Could not compete with those who work for less	8.8%	7.3%	10.2%	13.7%	14.6%	9.5%
Jobs do not pay enough	17.2%	22.3%	29.2%	29.9%	31.8%	32.3%
Does not like local people	11.6%	10.9%	7.8%	8.6%	8.1%	8.5%
Wants to get away from family	20.0%	20.5%	9.4%	14.5%	14.6%	15.9%
Too young to get tied down with another person	8.4%	7.3%	12.6%	10.3%	11.9%	11.4%
Wants to get away from friends	3.6%	2.3%	7.0%	6.0%	8.6%	7.5%
No chance for women in job market	5.6%	7.7%	6.2%	8.6%	10.8%	13.4%

As can be seen in Table 18, the economic factors which might prompt migration were much more critical for Blacks and Mexican Americans than for Anglos. As examples, nearly 50 percent more Blacks and Mexican Americans checked the fact that jobs paid poorly than did Anglos, and twice as many Blacks and Mexican Americans noted that futures were dim for high school graduates. Anglos more frequently than minorities cited dissatisfaction

with community people and family as reasons for possible out-migration; the minorities more than Anglos cited dissatisfaction with friends, romantic involvements, and the job situation for women. It is of importance to note that, when comparing VE and Non-VE students within the ethnic groups, there is no significant difference in distributions; that is, VE and Non-VE students of the ethnic groups give essentially the same reasons for possible out-migration.

Jobs and People Who Get Them

Several items in Form A/B attempted to gain insight into how students saw the availability of jobs and who would get them. Given specific examples of what kinds of occupations were contained within them, four major occupational groupings--professional and technical, skilled and semi-skilled, clerical and sales, and unskilled--were presented to students, and they were asked to indicate the extent of their availability in their home cities and to indicate who might obtain them by ethnic group.

Direct comparison between actual availability of jobs and judgments of availability by students cannot be made at this time since base information on the actual situations in communities is not currently available. In general, however, students felt that there were limited openings for professional and technical workers and many openings for all others. Anglo students saw more openings at professional, skilled, and clerical levels than did minority students. Blacks saw more openings than did Mexican Americans and Anglos at the unskilled level. As projections of perception of reality it is obvious that Anglo students saw the employment situations in their home cities in a much more optimistic light than did Black or Mexican American students.

TABLE 19

VE Students' and Non-VE Students' Views
of The Ethnic Groups Most Likely to Get Jobs,
in Percentages of Total Responses

Category of Job and Ethnic Group	Anglo		Mexican American		Black	
	VE Students	Non-VE Students	VE Students	Non-VE Students	VE Students	Non-VE Students
Professional						
Anglo	30.2%	38.2%	42.9%	36.2%	42.5%	31.9%
Mexican American	2.1%	0.5%	0.8%	0.9%	7.5%	8.8%
Black	0.0%	0.5%	3.6%	0.9%	0.7%	0.5%
Anyone	67.7%	60.8%	52.7%	62.1%	49.3%	58.8%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Skilled						
Anglo	10.4%	7.9%	6.9%	9.7%	14.4%	12.8%
Mexican American	3.5%	4.5%	3.7%	7.1%	28.0%	21.2%
Black	3.5%	1.0%	18.2%	8.0%	2.9%	2.2%
Anyone	82.7%	86.6%	71.2%	75.2%	54.6%	63.7%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Clerical						
Anglo	17.0%	14.6%	21.2%	17.2%	20.1%	22.2%
Mexican American	2.2%	2.0%	3.7%	6.0%	15.0%	11.1%
Black	5.7%	1.5%	5.4%	5.2%	4.7%	2.2%
Anyone	75.1%	82.0%	69.6%	71.6%	60.2%	64.4%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unskilled						
Anglo	0.5%	3.4%	2.4%	2.7%	3.4%	2.3%
Mexican American	29.3%	24.2%	22.0%	18.2%	44.5%	31.4%
Black	2.7%	11.8%	15.4%	16.4%	8.1%	15.1%
Anyone	67.6%	60.7%	60.2%	62.7%	44.0%	51.2%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

The choices for "who gets the jobs?" were Anglos, Blacks, Mexican Americans, and Anyone. As seen in Table 19, without exception the modal response of all students was Anyone to all four categories of occupations. This was also true of the individual subgroups with one exception: Black VE students indicated by the smallest of differences (44.5 percent as against

44.0 percent) that Blacks would be more likely to get unskilled jobs than Anyone. Of interest is the magnitude of the votes for Anyone. Anglos consistently saw Anyone getting the jobs more emphatically than did Mexican Americans or Blacks, who were somewhat more cautious. As an example, 67.7 percent of the Anglo VE students, and 60.8 percent of the Anglo Non-VE students felt that professional/technical jobs were available to Anyone, while only 49.3 percent of Black VE students and 58.8 percent of Black Non-VE students saw such jobs for Anyone. After Anyone, students of both minority groups saw Anglos getting the professional jobs more so than Anglo students themselves. In general, Anglo students indicated that prejudice in employment was less important than it appeared to be for minority students. Obviously, all students were projecting their own probable situation in employment where Anglos could afford to see things more optimistically, minority students more cautiously.*

What Do Students Look Forward To?

Table 20 presents the results of asking students what they looked forward to in life. Seven alternatives were presented to students which they were to rank in order of importance: rank 1 assigned to the most important thing, rank 2 assigned to the next most important thing, etc. Mean ranks were computed for each alternative and then alternatives were re-ranked to indicate, from 1 to 7, their positions relative to one another. As can be seen

*In analyzing the responses of the Black students in the 11 cities, they felt that discrimination in employment would be somewhat of a problem. The employers interviewed, however, viewed problems other than discrimination as presenting more difficulty to the student in job seeking.

TABLE 20

Things Looked Forward To by
VE and Non-VE Students, by Ethnic Group

Things Looked Forward To	Anglo				Mexican American				Black			
	VE		Non-VE		VE		Non-VE		VE		Non-VE	
	Mean Rank	Rank Order	Mean Rank	Rank Order	Mean Rank	Rank Order	Mean Rank	Rank Order	Mean Rank	Rank Order	Mean Rank	Rank Order
To get all the education I want	3.13	2	2.69	2	2.31	1	1.97	1	2.12	1	2.17	1
To get the job I want the most	2.75	1	2.64	1	2.42	2	2.63	2	2.58	2	2.45	2
To earn as much money as I can	3.82	3	4.15	4	3.42	3	3.52	3	3.28	3	3.20	3
To live in the kind of place I like best	3.84	4	3.90	3	4.12	4	4.12	4	4.39	4	4.42	4
To have the kind of house, car, etc. I want	4.71	5	4.89	6	4.83	5	4.68	5	4.66	5	4.70	5
To have lots of free time to do what I want	4.82	6	4.95	7	5.24	6	5.21	6	5.20	6	5.70	6
To get married and raise a family	4.85	7	4.71	5	5.62	7	5.64	7	5.58	7	5.71	7

in Table 20, "to get all the education I want" is ranked first as a desire for the future for VE and Non-VE students in both minority groups and is ranked second by both VE and Non-VE Anglo students. Ranked as the first four preferences for the future, although in distinct order for Anglos (and within the Anglo group) are obtaining desired education, desired job, desired income, and desired place of residence. The least desired alternative for all but Anglo Non-VE students is the prospect of marriage and a family. It bears note that, regardless of ranking, minority groups stress education, preferred job, and income significantly more than Anglos. Anglos, on the other hand, stress free time, preferred residence, and marriage significantly more than Blacks and Mexican Americans.

For both the Black and the Mexican American samples, the rank orders are identical to the responses given previously by the Black students interviewed in the 11 cities (1973-1974) and the responses given by the Mexican American students in the survey conducted in 1972-1973 in ten Texas cities. There is no variation by program enrollment; that is, both groups--VE and Non-VE minority students continually stress education, employment, and earning capacity as their first three preferences.*

A Note on VE Students

The last two pages of the A/B questionnaire were designed for VE students only as they have continually been the focus of this research effort. Special items inquire into the VE student's program, the relatedness of his program to his present and future work plans, how he learned about the program and why he enrolled in it, and his general feelings toward the program. The following section details their responses.

Table 21 summarizes the vocational programs in which the VE students in the sample were enrolled. As can be seen in this table, Anglo and Black students were distributed in approximately the same manner among the major U. S. Office of Education program classifications. As found in the previous study conducted by the Center, Mexican Americans were more represented in Trade and Industrial programs and less represented in most of the other categories. However, each of the ethnic groups was represented in all major categories. With rare exception, there were representatives of all ethnic groups in individual programs. The spectrum of programs in Table 21 would indicate that the sampling technique in the selection of VE students produced samples that well cover major VE offerings in the target cities in Texas.

*Black Youth and Occupational Education in Texas (1974) and Mexican American Youth and Vocational Education in Texas (1973), University of Houston, Center for Human Resources.

TABLE 21

Vocational/Technical Program Enrollment
for VE Students by Ethnic Group

USOE Code	Program	Anglo		Mexican American		Black	
		Number	Percent	Number	Percent	Number	Percent
01	Agriculture	2	0.9%	10	3.0%	1	0.3%
04	Distributive Education	15	6.7%	11	3.3%	10	2.7%
07	Health Occupations	23	10.2%	13	3.9%	33	8.7%
09	Home Economics (general)	34	15.1%	9	2.7%	86	22.8%
14	Office Education	39	17.3%	46	13.9%	71	18.8%
16	Technical Education	1	0.4%	19	5.7%	3	0.8%
17	Trade and Industrial Occupation	80	35.6%	187	56.5%	131	34.7%
-	Other	31	13.8%	36	10.9%	43	11.4%
	TOTAL	225	100.0%	331	100.0%	378	100.0%

More than half of the VE students in our sample were in their first year of vocational training, somewhat less than a third in their second year, and about 15 percent were in a third or fourth year.

About a half of all VE students held out-of-school jobs at the time of this survey. Of these, 30.8 percent indicated that their jobs were related to their VE programs, either because they were integral parts of such programs or because of skills required on the jobs were those which they had learned, or were learning, in the programs. Considerably more Anglos (40.3 percent) than either Mexican Americans (25.0 percent) or Blacks (29.4 percent) were employed at jobs related to their VE programs.

VE students were requested to indicate those persons who assisted them in their choosing a VE program in high school. Using a scale from 1 to 3,

with 1, "very helpful"; 2, "helped a little bit"; and 3, "did not help at all," the extent of assistance may be seen in Table 22. For none of the ethnic groups were any of these persons very helpful: all were only somewhat helpful, a few tending to be not helpful at all. Those most helpful to Anglo students were parents and VE teachers; to Mexican Americans, VE teachers, regular academic teachers, and vocational counselors; and those who most assisted Black students in their decision were parents, VE teachers, and academic school counselors. The magnitude of responses would indicate that Black students were helped to a greater degree than other students, and Mexican American students to a greater degree than Anglo students. This could indicate that minority group students were more prone to be guided into vocational programs by school personnel although the students themselves did not feel that they were placed in VE programs (see Table 23).

TABLE 22

Helpfulness Afforded by Individuals in Selecting a Program In High School for VE students, by Ethnic Group (1=Very Helpful; 2=Helped a Little Bit; 3=No Help at All)*

Individual	Anglo	Mexican American	Black
Regular or academic school counselor	2.35	2.15	1.97
Vocational counselor	2.26	2.10	2.07
Regular teacher(s)	2.46	2.10	2.10
Vocational education teacher(s)	2.10	2.00	1.95
Adult friend(s)	2.17	2.09	2.15
School friend(s)	2.16	2.12	2.08
Parents	2.01	2.58	1.77
Brother or sister	2.55	2.26	2.28
Other relatives	2.62	2.40	2.28
Non-school career counselor	2.50	2.13	1.99

*Numbers in table represent mean values.

When asked how they had learned about VE programs in their schools all students identified friends at school as being the primary source of information. Additional major sources of information for Black students were teachers and academic counselors; for Anglo students an additional major source was academic counselors and, for Mexican American students, teachers. Least important for all students were parents who requested they look into VE programs and graduates of their schools.

VE students were asked to check reasons "why students like yourself enroll in vocational education programs." The list and their responses are found in Table 23. This table indicates that students were in such programs basically because they felt that they might be helpful later on and because they liked the programs in which they were enrolled. These two factors reflecting personal desire or volition far exceeded in importance the other factors reflecting that students were somehow led or forced into VE programs because others--academic counselors, vocational counselors, teachers or parents--wished them to be in such programs. In fact, neither one of the two personal reasons is numerically greater than the non-personal reasons combined for each ethnic group. It may thus be surmised that the bulk of students in our sample, regardless of ethnic identity, were enrolled in VE programs because they saw advantages to themselves in, and personal gratification through, these programs. Many community and school informants interviewed, however, felt somewhat uneasy about the recruitment of students into VE programs. Black and Mexican American students continue to be overrepresented in VE programs in Texas,* and the minority communities feel that there are many students arbitrarily placed in VE programs merely because of ethnicity. Some school personnel say that many students are placed in VE programs regardless of ability or interest in such programs.

*See Manpower and Vocational Education in Texas, a report published by University of Houston, Center for Human Resources (1974).

It is obvious that greater efforts must be made to improve the selection of students into VE programs. Increased career education activities, especially in the middle grades, and improved counseling and guidance services would be two approaches which could help to ameliorate this sensitive problem.

TABLE 23

Reasons Why VE Students Enrolled in Vocational Programs, by Ethnic Group, in Percen ages of Total Responses

Reasons for Enrollment	Anglo N = 250	Mexican American N = 373	Black N = 444
I like it	57.6%	60.6%	54.3%
My regular counselor told me to take it	4.4%	6.2%	7.4%
My vocational counselor told me to take it	2.8%	7.8%	5.9%
My teacher(s) told me to take it	4.4%	11.8%	7.7%
It was the only one available	4.8%	7.0%	5.9%
My parents told me to take it	6.4%	11.0%	9.7%
I felt it might be helpful later on	66.8%	65.4%	65.1%
Other reasons	19.6%	10.5%	5.4%

Students were asked if they felt that their first job after graduation, and if most of their future jobs, would be related to the VE programs in which they were enrolled. Their responses are given to both of these questions in Table 24. About two-thirds of all VE students felt that their first jobs after graduation and most of their future jobs would be either definitely or possibly related to their high school vocational curricula. Anglo students in both instances, were more definitely convinced of the relationship than minority students.

TABLE 24

VE Students' Views of Possible Relationship
Between Current Program, First Job After Graduation,
and Future Jobs, by Ethnic Group,
in Percentages of Total Responses

Possible Relationship	First Job After Graduation			Future Jobs		
	Anglo N = 219	Mexican American N = 315	Black N = 374	Anglo N = 215	Mexican American N = 309	Black N = 374
Yes, definitely	34.2%	25.1%	22.5%	36.3%	29.1%	21.7%
Yes, possible	32.4%	36.8%	42.2%	36.3%	43.4%	40.4%
No, does not think so	19.6%	16.2%	18.2%	15.3%	10.7%	16.6%
Doesn't know	13.7%	21.9%	17.1%	12.1%	16.8%	21.4%

About a third of all VE students noted that, at times, they had felt like dropping out of their programs, and there is no appreciable difference in this among ethnic groups. That most would probably not do so is indicated in one of the last questions in the survey instrument directed only to VE students: "Do you like your vocational education program?" To this question 85.8 percent of the Anglo students, 91.0 percent of the Mexican American students, and 90.3 percent of the Black students, answered "yes."

The preceding analysis has demonstrated that there are differences not only between VE and Non-VE students, but among ethnic groups in the state of Texas. Part III of this report summarizes the results of this study while attempting to describe and assess the relationship between occupational education and minority groups in Texas.

PART III

PROSPECTS AND PROBLEMS IN OCCUPATIONAL EDUCATION

One of the top priorities of any educational program is that of making education and/or training relevant and meaningful to the student it serves. Adequate preparation for a job and career must be an integral part of a secondary school curriculum. The transition between school and work is not an easy one, but the more that relationship is stressed while the student is still in school, the easier it will be for the young person to make a suitable adjustment. The advent of career education has helped to focus attention on the complete development of an individual with the express purpose of facilitating his entry into the country's social, political, and economic life.

Vocational education continues to be a viable part of career education. It has the potential of becoming the major training vehicle for young people, but only if it meets the challenges that have been thrust upon it by societal changes. The rapidly changing nature of the labor market combined with the increased demand for skilled and technical workers suggests that occupational education at the secondary level must provide the type and quality of training that is demanded by the labor force. In addition, educational and training opportunities must be offered equally to all students regardless of socioeconomic, racial, or ethnic status.

This report attempted to describe the plans that high school students have for their future, the problems that they might encounter, and the needs of such students. Their attitudes and feelings toward school, vocational education, work, and other such variables are explained and discussed. The

total effort of this study has been to provide a framework from which improvements and changes can come about within educational structures. These changes and/or improvements will hopefully provide young people with an adequate preparation which will enable them to exploit their abilities and potentials upon entering the world of work.

Summary

A total of 1605 Mexican American, Black, and Anglo high school students were interviewed in 15 Texas high schools. The sampling represented six of the largest urban areas in the state--Austin, San Antonio, Houston, Dallas, Fort Worth, and Galveston. The responses given by these students were compared in three different ways: among ethnic groups, within ethnic groups by VE or Non-VE program, and by ethnic groups and program.

Generally, it was found that the socioeconomic status (SES) of students in different school programs and ethnic groups was not the same, although as a whole the socioeconomic characteristics of the sample were not very high (based on a two factor index of social position - education and occupational status). Non-VE students tended to have higher SES levels than VE students; Black and Mexican American students had lower SES characteristics than Anglo students. The lowest of the profiles was that of the Mexican American VE student, probably a reflection of the parents' low educational levels. The families of Black students had higher educational attainments but lower occupational characteristics. Anglo Non-VE students had the highest socioeconomic patterns.

There were three major preferred post-high school alternatives for all students: a steady job, university or college work, and advanced vocational technical training. When indicating their most preferred alternative, Anglo

and Mexican American students chose a steady job as their first choice; Blacks selected attending a university as their first preference, but a steady job was a close second choice. The second most preferred alternative for Anglos and Mexican Americans was attending a university, although this choice was more popular among Anglos than Mexican Americans. For all three ethnic groups, advanced vocational/technical training was the third choice but the number of students preferring this was considerably less than for the first two alternatives. Union apprenticeship programs and government training programs ranked lowest on the list for all ethnic groups. Although enlistment in the military service was a minor alternative,it still holds some attraction for high school youth--mostly for Mexican Americans, next for Blacks, and least for Anglos. In looking at the total sample, it is significant that more than one-third of the students chose a steady job as their first preference. It should also be noted that Non-VE students checked as their first preference college or university work more so than their VE counterparts.

Recognizing that young high school students often consider more than one alternative or in many instances are not really sure of their future post-high school plans, they were given the opportunity to explore various options and rate them on the following basis: "I want to do this," "I am not sure," and "I don't want to do this." Using this format, students of all ethnic groups indicated their strongest desire was for a steady job. A college education was the second choice of all subgroups except Mexican American VE students who selected advanced vocational/technical education as their second preference and college as their third choice. Anglos and Blacks chose advanced vocational/technical training as their third choice. Although this selection lagged far behind a steady job, the other alternatives--owning their own business, entering a union apprenticeship or government training program, and

joining the military elicited more support when students were presented with options about their future. VE students and minority students generally considered government training programs and the military more so than Non-VE and Anglo students.

When students were asked about the type of job they would get after graduation from high school, most students saw themselves fitting into either lower blue-collar or white-collar jobs, most of which are entry level jobs. As expected, VE students identified jobs in the blue-collar sector and Non-VE students in the white collar area. Although realistic about their expected jobs, they tended to overestimate their earning capacity--VE more than Non-VE and minority groups more than Anglos. Perhaps the feeling that they had a skill to offer the employer made the VE student more confident of a higher entry level wage than the Non-VE student. Most students--about eight out of ten--indicated that they expected their first job to be in their home city.

All students, regardless of future plans, responded to a question inquiring into college and university work. Nearly four out of ten students preferred a large state university, about three in ten preferred attending a local community or junior college for their first two years, then transferring to a university, and more than two out of ten preferred a smaller state university. Less than ten percent indicated a preference for a private university. In all ethnic groups, more VE students than Non-VE students indicated an interest in community or junior colleges. In terms of a specialization in college, the three most favored majors were the professions, business administration and the technical fields although one-fifth of the sample selected the Other category with health occupations being the most frequently

mentioned, especially among females. There were several differences by ethnic group and program; for example, more Non-VE than VE Black students preferred the professions; more VE than Non-VE Anglo students chose technical fields as their area of specialization; and more VE Mexican American students opted for engineering and technical fields with Non-VE Mexican Americans selecting education and the professions.

In a similar question students were asked to indicate their preferences for post-secondary vocational/technical education. More than seven out of ten students said they would attend public institutions such as a technical institute or community college, and the three programs most frequently favored by students were health care, business, and data processing. Most students expected to obtain this training either in their local area or in a city in Texas close to home. Mexican American VE students appeared to be the most home city bound, and Blacks (both VE and Non-VE) were the ones who most prefer to leave the state for educational purposes.

Marriage as a career alternative was expressed by only two out of ten students, mostly by female students. Mexican American students were more inclined toward marriage after graduation than were Anglo or Black students. Nearly four out of ten students indicated that once married, a young woman should work part-time and do her best to take care of the home. More Mexican American students believed that the woman should stay at home and care for the family (about a third), while fewer Blacks shared this view.

A series of items inquired into the students' ideal job, the reasons for wanting that job, and the job he really expected to get. More than four out of ten students listed ideal job as falling in the professional or highly skilled area, with craftsman, skilled jobs and those in the sales and clerical field appearing as a second and third choices. The major reason for wanting

these ideal jobs centered on "it pays good money." The two other most frequently mentioned reasons were "it is exciting work" and "I can help other people." When asked about what kind of job they really expect to have most of their lives, students tend to become less idealistic in making their selection. Fewer students indicate the professional and technical fields as their ideal job, and more students selected the non-manual sales and clerical work and the crafts and skilled categories. Even so, the students' job expectations remain high, but it seems unlikely that many will eventually reach their ideal or even their expected job (especially those who opted for the professional jobs). Many indicated a desire to obtain a job immediately after graduation from high school, and most of the professional and technical jobs require that the student acquire additional education.

The involvement of parents in their sons' or daughters' school activities and their attitudes toward school were ascertained through a series of items to which the students responded and through limited personal interviews conducted with parents. Most students indicated that their parents encouraged them to remain in school. However, Non-VE parents were more active in school affairs than VE parents. Black parents and Non-VE Anglo parents seemed more supportive of a college bound curriculum for their children with Mexican American parents less so. In fact, Mexican American parents participated less in school activities, knew very little about school, and helped their children least with their schoolwork. This apparently is a reflection of their low socioeconomic status, especially the Mexican American adults' educational deficiency. In interviewing Black and Mexican American parents, it was found that although they express much interest in their children's work, this interest is frequently a passive one.

Students indicated that lack of work experience and job skills were the two most troublesome job problems. Overall, it appears that Anglo students have more confidence in their job seeking skills, Mexican Americans are somewhat apprehensive about their ability to understand and communicate effectively, and Blacks see various factors related to the interview situation as somewhat threatening. Assistance in job hunting skills was not forthcoming from many school related persons. Vocational teachers, however, were consistently more helpful to VE students than Non-VE students, and parents appeared to be the most helpful out-of-school source, even more than any of the in-school persons. As in previous studies, students indicated that job related topics should be discussed in high school, and many stated their intention to participate in such a course if it was offered. Black and Mexican American students were more emphatic in this regard.

Nearly a third of all students indicated that there were some programs in the schools about which they would like more information. Black and Mexican American VE students most frequently mentioned this desire. On the other hand, Non-VE students expressed more of an interest in programs not available in their home school, mostly in the area of health occupations and home economics. High schools should make an effort to tap the interests of the students and provide them with the kind of programs in which they are interested. As seen by this response, there appears to be more potential VE enrollees in the schools than presently indicated.

In portraying the best kind of student suited for VE programs, all students felt that the best prospect is one who has to make a living after he graduates from high school. The bright student was mentioned less frequently,

but VE students were less prone than Non-VE students to dismiss him as a potential VE student. Both Black and Mexican American students, more so than Anglos, believed that the VE student would be from a minority group, perhaps taking a cue from his school or classes, where minority groups are often overrepresented. This was especially true in the larger urban school districts.

Non-VE students, more than VE students, participated in extracurricular activities, with Anglos and Blacks having the highest rates of participation, Mexican Americans the lowest. VE students, however, held more out of school jobs than Non-VE students. This is probably a function of their participation in a VE course where oftentimes a job is a required condition. Most of the students had received assistance in finding these jobs, mainly from school related sources.

Migration possibilities among the students were explored,and two-thirds of the students indicated that they were not planning to move from their home city. Regarding possible future migration, students said they would move if there were a lack of economic and employment opportunities. The factors which might prompt migration were more crucial for Mexican Americans and Blacks. They more frequently mentioned that jobs did not pay well and that there was no real future for a high school graduate in their home community. Generally, most students were reluctant to migrate, but if conditions were unsatisfactory some of them would not hesitate to move. It seems, however, that urban youth will stay in their home cities and the influx into the metropolitan areas will continue.

Although all students felt that there were limited job openings in the higher employment categories, Anglo students perceived more employment opportunities in their home cities than minority students. That is, Anglos felt that there were more job openings at the professional, technical, skilled and

clerical levels for them. At the unskilled level, Blacks saw more openings than did Anglos or Mexican Americans. When asked directly "who do you think will get these jobs" (in terms of ethnicity), the modal response for all students was that anyone could get them. However, the intensity of response varied among the ethnic groups. Minority students saw Anglos as getting the better jobs more so than Anglos themselves, who felt that anyone could get whatever job he wanted. Anglos appeared to be more optimistic when projecting their own employment situation than did Mexican American or Black students, who tended to perceive some discrimination in the labor market.

The desire for obtaining as much education as possible was the first preference of minority students when responding to an item inquiring into future preferences. Anglo students indicated that their first preference was to get the job they most wanted. Minority students selected this as their second most preferred future alternative. All three groups cited earning capacity as third choice for the future. Blacks and Mexican Americans stressed education, preferred job, and income more than Anglos.

In a separate question limiting itself to educational aspirations, all students rejected the idea of not going to school again, and one out of three indicated that he wanted to graduate from a four-year college or university. One out of five showed a preference toward completing a post-secondary vocational/technical program. Blacks--both VE and Non-VE--were more inclined toward college work, including graduate studies. Non-VE Anglo and Mexican American students showed college graduation as their first preference but Mexican American students were less inclined toward graduate studies. Although all three groups stress the importance of educational achievement, the educational aspirations of Blacks appear to be the highest, Mexican Americans the lowest.

The VE sample indicated that while Black and Anglo students were evenly distributed throughout the major VE programs, Mexican Americans continue to be overrepresented in the Trades and Industrial programs and less represented in the other categories. Most VE students were in their first year of vocational training and felt that the training they were now receiving would be related to their future jobs. Nine out of ten students said that they liked the VE program in which they were now enrolled. When asked why they enrolled in VE programs, the two major reasons given by all students were (1) that the program might be helpful to them, and (2) that they liked the program. Despite the students' responses, some community and school respondents continue to question the selection procedures for placing students in VE programs. Blacks and Mexican Americans appear to be more concerned with this issue, as the overrepresentation of minority students in VE programs is rather pronounced, especially in the larger urban areas surveyed.

Some Implications for Occupational Education

The findings of this study reinforced the recent trend encountered among young people: that more of them are opting for jobs rather than college immediately after graduation.* It must be kept in mind, however, that this sample represented students coming from low socioeconomic backgrounds; these students are less likely to attend college because of financial constraints or inadequate preparation. Nevertheless, the young people interviewed here, and especially Anglo youth, showed more of a disposition toward getting a job. Young Blacks--even those in VE programs--seemed more enthusiastic about attending college than did Anglo or Mexican American youth. School personnel interviewed in this study also felt that less students were thinking of going to

*See Employment of High School Graduates and Dropouts, October, 1972: "The High School Class of 1972," Special Labor Report 155, U.S. Department of Labor, Bureau of Labor Statistics, 1973.

college because of rising tuition costs, less demand for college trained graduates, an increase in post-secondary occupational training institutions and the upswing in their popularity, and, in many instances, there were good paying jobs for young people with a technical skill. In this sample, the desire to obtain a job after graduation from high school was probably based more on financial need than on any other factor.

The socioeconomic level of students enrolled in VE secondary programs was generally low, with minority students, especially Mexican Americans, exhibiting lower socioeconomic characteristics. It appears then that middle class parents of all ethnic groups are still reluctant to accept vocational education as an alternative for their son or daughter. Minority parents of VE students generally support their child's program but Black parents seem more inclined toward college work for their children.

Despite the students' backgrounds, their educational aspirations remained high. Again, Blacks, more so than Anglos and Mexican Americans, had higher educational aspirations. Occupationally, students aspired mostly for professional and technical jobs, but expected to obtain jobs in lesser occupations. It does not appear that many will realize their expected career job choices, as the education and training required for such jobs will not be achieved by many in this sample. It should be noted that interest in the health occupations was high, especially by Black females.

The implications for action as a result of this study are apparent. Vocational education in the secondary school setting must be made more attractive for all students. The community must be informed about such programs and parents--especially those who view VE programs in a disparaging light--must be presented with the more positive aspects of VE programs. Until the majority

of parents see vocational training as a viable and equally attractive alternative for their children, vocational education will continue to be good for someone other than their own child.

The career education concept could be used as a vehicle to bolster the image of vocational education and attract more students. If students were assured that a person who enrolled in a VE program could also take the courses required to gain admittance into a college or university, acceptance of VE would be more easily forthcoming. Parents would endorse the idea that such a student had the alternative of either going to work, attending a post-secondary technical/vocational program, or enrolling in university upon graduation from high school. One of the objectives of career education is to provide more students with such options.

Career education, however, should be properly introduced and implemented for it to be effectively utilized. Academic as well as vocational personnel in schools throughout the state should make more of an effort to combine their resources through career education in order that the student may receive the best education possible. As mentioned in other reports and recommendations addressed to state and local educational agencies and educators, guidance and counseling activities are of vital importance.* Counselors and teachers alike should prepare themselves to offer career and occupational guidance to their students. Given the present overextended role of the counselor, teachers and other school personnel could share some of the burdens by broadening their classroom curriculum to include more career education instruction. Teacher and

*See Mexican American Youth and Vocational Education in Texas, (1973), Black Youth and Occupational Education in Texas, (1974), and Occupational Education in Texas: Summary and Conclusions, (1974), all published by the Center for Human Resources, University of Houston. The Advisory Council for Technical-Vocational Education in Texas has also made specific recommendations regarding guidance and counseling.

counselor training universities, as well as other related school in-service training personnel, must make a special effort to expand and improve their preparation programs in order to increase the professional development of school personnel in the fields of career education and occupational guidance activities. Some universities have begun to offer courses in career education, occupational guidance and career information, and group guidance techniques. Appendix B of this report describes a special program which provides in-service training to school personnel--mostly counselors--through the Educational Service Centers throughout the state.

A Note on Vocational Education Research

Given the emergence of occupational training within recent years, the role of vocational education research becomes extremely critical. The questions that have been previously raised concerning the role and adequacy of occupational programs in the secondary schools will persist. The trend toward accountability in all aspects of education will continue; vocational education will still be faced with such questions. Are vocational education programs meeting the present and future needs of the community? Specifically, are occupational programs training students to become productive members of the labor force? Following up on the work and training experiences of VE graduates is one way of gauging the effectiveness of occupational training programs. Contacting employers who hire VE graduates is another method through which VE can be evaluated. This and other studies have found that the employer is probably the best and most objective source of information concerning educational programs. His viewpoints, observations, expertise, and cooperation are vital to the succes ful operation of any occupational training program.

Although the focus of vocational education research should be on the VE student, VE program offerings, and the like, the Non-VE student should be an integral part of any study or investigation concerning occupational training programs. The findings of this study confirm that there are many students who are undecided about their futures, and are presently enrolled in a general curriculum, that is, one in which the student is neither college bound nor involved in a VE program. He is probably the most ignored student in the school setting. It seems that the student would benefit from a vocational education curriculum, but his needs and interests need to be identified. Any research effort should encompass the total school setting, as vocational education cannot be an independent part of the educational system.

One persistantly mentioned area of concern is the selection and recruitment of students into VE programs. Although guidance and counseling play an important role in the selection process, the responsibility must fall on all school personnel and parents. More specific data is needed here in order to improve, or modify if necessary, current recruitment and selection practices. Not only would this assist school personnel, but it would serve to allay the feeling, especially on the part of the minority communities, that students are arbitrarily placed in VE programs.

Vocational education research could be expanded to cover many fields: the changing role of females in society, personnel development, curriculum development, the role of career education in vocational training, continued manpower analysis, and the development of new programs. The Advisory Council on Technical-Vocational Education in Texas has documented many other needs in the occupational education field and by conducting hearings throughout the state keeps a close watch on new developments and community attitudes and needs. This list is by no means comprehensive.

The important factor in research is that significant results be utilized in an effective manner by educational practitioners. Effective utilization can only be accomplished through the effective dissemination of such studies. Positive steps have recently been taken in this regard. The Division of Occupational Research and Development of the Texas Education Agency has initiated annual conferences whereby persons involved in vocational education research are given an opportunity to present and discuss their projects and/or findings.* A similar conference concerning career education was held in Dallas in April, 1974. The continuation and expansion of such conferences definitely increases awareness and knowledge about vocational education research activities and, hopefully, will improve the utilization function. For without adequate translation of research findings into practical terms and programs, that research would be meaningless. And only through dissemination of information can parents, school personnel, and the community in general become cognizant of vocational education and the needs, problems, and aspirations of the young people in the state of Texas.

*The first annual conference was held in Arlington, Texas, on May 7-9, 1974.

APPENDICES

A. School Districts and High Schools Surveyed

B. A Description of the Group Guidance Program Developmental Stages

APPENDIX A

SCHOOL DISTRICTS AND HIGH SCHOOLS SURVEYED: Fall, 1973

Austin Independent School District

- Reagan High School
- Stephen F. Austin High School
- Lanier High School
- Johnston High School

Dallas Independent School District

- Pinkton High School
- South Oak Cliff High School
- Bryan Adams High School
- Skyline High School

Fort Worth Independent School District

- Trimble Technical Center

Galveston Independent School District

- Ball High School

Houston Independent School District

- Jefferson Davis High School
- Houston Technical Institute
- Madison High School

San Antonio Independent School District

- Fox Technical Center
- Sam Houston High School

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APPENDIX B

A DESCRIPTION OF THE
GROUP GUIDANCE PROGRAM DEVELOPMENTAL STAGES

PHASE I - 1968-1971

The Vocational Guidance Service - Group Guidance Program was originally funded in 1968 by the U.S. Department of Labor as an Experimental and Demonstration project in Houston, Texas, designed to prepare youth to make a positive transition from high school to suitable employment or post-high school training. In three years of operation, the project staff involved over 5,560 students in sixteen (16) area high schools in the development, field testing, and refinement of curricular materials. Generally, the objectives of the program were:

A. to relate total school and extra-curricular activities to the world of work;

B. to assist students in making adequate and realistic self appraisals with regard to post-high school employment and training plans;

C. to acquaint students with the extent of employment possibilities existing in both the local and national labor markets, including information related to job structuring and classification systems;

D. to provide students with the job-seeking techniques and skills necessary for maximum success in entering the labor market upon graduation or after completion of post-high school education/training;

E. to increase students' awareness of and provide competency in social and work-related interpersonal relationships and attitudes; and

F. to afford students the opportunity for developing decision-making skills.

Included in the products of the three-year experimental model are: 1) a comprehensive operations manual designed to serve as a guide for project replication; 2) student curriculum guides and materials, including facilitator instructions; and 3) a manual designed as a guide to train educational personnel in the use of the student curriculum materials utilizing task-oriented group processes. It was anticipated, however, that even while the above documents were being prepared, if the experimental project was to become an integral part of the education system in Houston, Texas, and elsewhere, that stronger implementation measures than developing the the above mentioned products would be necessary. This concept became increasingly evident as the project staff gave presentations to school districts which indicated interest in the program.

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PHASE II - 1971 - 1972

While most of the participants at these presentations and workshops generally voiced favorable reactions regarding the program, many posed such issues as students scheduling difficulties, conflicting priorities, space problems, lack of basic group process practice, and others which would act as barriers to initiating a group guidance program in their schools. As a result of these kinds of questions and issues, work was started on the initial implementation program which operated in Consortium C.

The mandate of the implementation proposal which was funded jointly by the U.S. Department of Labor and by the Division of Occupational Research and Development of Texas Education Agency was to train 160 educational personnel within Consortium C. between December 1, 1971, and June 30, 1972, to implement and maintain an effective group vocational guidance program. These personnel included appropriate university staff members and secondary school administrators, guidance personnel and teachers. The objectives of this training program were to equip these personnel with the competencies to: 1) implement an expanded group guidance program in their respective school systems; and 2) provide similar training to additional educational personnel within the Consortium. By involving instructors from the teacher-training institutions within Consortium C and the guidance coordinators from each of the three Education Service Centers, the continued training would be provided both at the University level (pre-service) and in the field (in-service).

The specific method for conducting the training required the Group Guidance Program staff to visit each participating school site during each scheduled group session to demonstrate, observe, and critique the training group sessions.

PHASE III - 1972 - 1973

As a result of increased requests for similar training activities from additional school districts within Consortium C as well as from Education Service Centers and school districts in numerous other parts of Texas, a definite need was recognized for the development of a more complete training process which could be made readily available in a practical and economically feasible manner. Therefore, as a continued cooperative effort between Texas Education Agency and the U.S. Department of Labor, concurrent projects were funded to: 1) develop and field test a Multi-Media Training Package which would constitute a comprehensive model for implementing the concepts, products, and methodologies developed by the original Group Guidance Program staff; and 2) to train 65 additional educators in Consortium C as well as to provide workshop training sessions in each of the twenty Education Service Centers in the State of Texas to accomplish the same goals as outlined in the original Consortium C implementation proposal.

PHASE IV- 1973 - 1974

At the conclusion of the second year of implementation activities in the State of Texas, a total of 566 educators have participated in the training activities. Several service centers have held or have scheduled repeat workshops to expand the training activities and program implementation. However, with continued emphasis and priorities given to comprehensive career education and other related fields--and numerous requests for training services and/or orientation sessions, there remained a recognizable need for a continued effort in training more educators. Generally, these requests were for: 1) initial training sessions in those service centers which could not or did not request training earlier; and 2) follow-up services which include local assistance, additional group process techniques, case development, and Education Service Center-based training assistance for those participating in the '72-'73 activities. Training and follow-up activities have continued through the 1973-74 school year.