Researchers gained useful information on the state of career education programs and their effectiveness for Hispanic youth by disaggregating the data from the Educational Testing Service's 1980 Survey of Career Information Systems in Secondary Schools. Despite the limitations of the study due to small sample size, the unrepresentative number of Hispanics included, and the omission of Puerto Ricans, results indicated that Hispanic students tend to have a different experience with career education than do Blacks or Whites. Student data indicated that Hispanics, especially females, sought career information from counselors and parents less than did Blacks or Whites and that they turned to teachers, friends, and other resources more than Whites. They also sought different kinds of information. School data indicated that schools with high Hispanic enrollments were more likely to have career education directors, school-made career materials, and Spanish-language career materials, and less likely to have access to computer terminals. Field reviewers recommended changes in the structure of career information systems and delivery of services; the role, training, and selection of counselors; the type of materials and resources selected; and the type and degree of parental involvement. Participants in a National Council of La Raza symposium called for more research. (SB)
CAREER INFORMATION AND HISPANIC HIGH SCHOOL STUDENTS

THE NATIONAL COUNCIL OF LA RAZA
1725 EYE STREET, N.W.
SUITE 200
WASHINGTON, D.C. 20006
(202) 293-4680

Prepared By

Lori S. Orum
Project Manager
Career Education Research Information Project
Office of Research, Advocacy, and Legislation

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Dr. Sally Andrade, President, Center for Applied Systems Analysis, Inc., Austin, Texas
Ms. Fresia Fernandez, Counselor, Dade County Public School System, Miami, Florida
Dr. Pedro Mercado, Director, Placement and Career Services Center, New Mexico State University, Las Cruces, New Mexico
Mr. Jose Adiel Milan, Director of National Programs, ASPIRA of America, New York, New York
Dr. Juan Perez, Counselor, Dallas Independent School District, Dallas, Texas
Ms. Renae Rojas, Center Director, LULAC National Educational Service Center, Miami, Florida
Dr. Dan Romero, Director, Counseling Center, University of California, Irvine, California
Ms. Grizelda Ruiz, Executive Director, LULAC National Educational Service Center, Seattle, Washington
Ms. Lucille Sapiens, Counselor, East Side Union High School District, San Jose, California
Mr. Rafael Torrec, Assistant Director, ASPIRA of Puerto Rico, Rio Piedras, Puerto Rico
Ms. Elena Toscano, Counselor, LULAC National Educational Service Center, Pomona, California
Mr. Richard A. Veloz, MPH, Senior Health Educator, East Los Angeles Child and Youth Clinic, Los Angeles, California
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CAREER INFORMATION AND HISPANIC HIGH SCHOOL STUDENTS

1. INTRODUCTION

Career education programs are a rather recent addition to American public education, growing out of the realization that high school experiences alone often do not provide youth with the skills that they need to become fully and productively employed. A variety of studies and experimental programs have been designed to increase students' awareness about careers and help bridge the gap between school and the world of work. Although Hispanic youth have traditionally suffered from high rates of unemployment, and are in need of programs which improve the school-to-work transition, few of these studies or programs have focused on Hispanics.

Hispanic youth are often referred to as the most under-educated youth. These young people have traditionally completed fewer years of schooling than Black or White students and have a dropout rate which is disproportionately higher than that of other students. Where these students have been employed, they have been largely located in low-paying occupations. Despite the need for career information systems which address the unique needs of Hispanic students, research information on which to base these programs is often lacking. Even when it is possible to do so, many studies do not disaggregate their data by ethnicity, making comparisons between White, Black, and Hispanic students impossible. Thus it was with much enthusiasm that the National Council of La Raza approached the opportunity to utilize the computer tapes from the Educational Testing Service's Survey of Career Information Systems in Secondary Schools to disaggregate the data and analyze the results by ethnicity and gender. The resulting information on Hispanics was disseminated to a group of field reviewers who examined its implications for career education programs serving Hispanics and made recommendations for improving those systems. The project also raised a number of other questions requiring further exploration. The results of NCLR's Career Information Project and recommendations for change and further study are presented in this paper.

II. BACKGROUND

A. The ETS Survey

The Survey of Career Information Systems in Secondary Schools was conducted by the Educational Testing Service (ETS) in 1980 for the National Institute of Education (NIE) and the National Occupational Information Coordinating Committee (NOICC). This study, originally proposed by the Office of Youth Programs, U.S. Department of Labor, was designed to be a national survey of what career information is being provided at the secondary school level, how it is being provided, and what its quality and value are. It is the first of two linked studies. The second, a comparative assessment of the effectiveness of different information delivery systems on the career awareness of youth, while not a part of this analysis, has also been completed and is available from ETS.

The survey was designed to gather data from both students and schools in order to produce a complete picture of the state of career information
resources. The survey proposal called for a school sample of approximately ten percent of all public secondary schools with grades 10, 11, and 12, and a concurrent sample of a smaller number of students in a subset of these schools. Schools devoted to atypical or special populations were eliminated because the government's particular interest was in the employment problems of low-income, urban youth, schools with large numbers of such students were oversampled to provide accurate estimates of resources available to this population. To accomplish this, the subcontractor, Mathematica Policy Research, Inc., of Princeton, New Jersey, divided the school population into three strata, using 1970 data. Stratum 1 included central city schools with 12 percent or more of their student bodies living in poverty. Stratum 2 included schools in nonmetropolitan areas regardless of the poverty status of the students. Stratum 3 contained remaining schools within standard metropolitan statistical areas (SMSAs) but not in the central city, or schools in the central city but with less than 12 percent of students in poverty. Stratum 1 schools were oversampled. The number of eligible schools to be included in the sample was finally set at 3,412. Of that number, only 1,894 schools (55.5 percent) responded to the questionnaire in time to be included. The rate of response was not uniform from schools in all three strata, as schools in Stratum 1 responded in lower than anticipated numbers. Of the schools that responded, only 147 had 20 percent or more Hispanic students.

The school survey (filled out by an administrator, director of guidance, etc.) answered a great number of research questions; however, some required a direct response from students. The student questionnaire was designed to answer questions about why students used resources and what students were looking for. This sample included 4,883 students from 155 schools. Only 257 of those students were Hispanic. Eight students from each of the three grades in each of the 155 schools were selected, with an equal number of schools being selected from each stratum. Because at least 20 percent of the schools in each stratum were selected, with an equal number of schools being selected from each stratum. Because at least 20 percent of the schools used non-random measures of selecting students to participate in the survey, ETS statisticians treated the sample as simply a large number of students who responded to a questionnaire and did not attempt to draw national estimates from it. Although it may be misleading to draw generalizations from the student sample, it does nonetheless represent a large number of students from all regions of the nation, and ETS stated that it believed the results to be "informative and useful." However, the extent of non-random selection is not known, nor the direction or amount of bias introduced by it. Therefore, no attempt should be made to derive national estimates from the student data. The data are to be treated as responses from a large number of students, with over 1,500 in each stratum.

Two research instruments were developed for use in this study: a school survey titled, "Career Information Systems in Secondary Schools: A National Survey of Occupational Information Resources," and a student survey titled, "Learning About Occupations: A National Study of High School Students." The school questionnaire consisted of 55 items of inquiry and the student questionnaire consisted of 60 items. The instruments were reviewed by the Committee on Evaluation and Information Services (CEIS) for the Council of Chief State School Officers. After receiving a recommendation from that group, they were formally approved by the Federal Education Data Acquisition Council (FEDAC) in accordance with government regulations.
The surveys were designed based on the following research questions:

A. Types and quality of career information resources
   1. What are the various types of career information resources currently available in secondary schools and what kinds of information do they contain?
   2. What is the quality of information contained in these resources?
   3. What types of schools have what types and quality of career information resources?

B. Management of and access to career information resources
   1. What school staff are responsible for these resources and what are their responsibilities?
   2. What arrangements must be made and by whom (for students to use these resources)?
   3. What types of schools have what management arrangements for career information resources?

C. Use of career information resources
   1. How often are resources used by students? Does frequency of use vary by type of resource?
   2. How often are the resources used by a student? Does frequency of use differ for different categories of students?
   3. For what purposes do students use the resources and what motivates these purposes?
   4. What specific kinds of information do students seek and obtain from these resources?

D. Use of additional career information resources
   1. What resources do students use in career planning in addition to the resources of the school?
   2. How frequently do students use these additional resources as compared to their use of the school's resources?
   3. What is the quality of these additional resources as compared to the quality of the school's resources?

Some of the research questions in this study could not be fully answered by the two survey instruments. For example, A2, D3, and the second part of D1 required a separate study by ETS.

The total array of ETS documents developed for this research project are available for purchase from ETS, Rosedale Road, Princeton, N.J. 08541:


B. The NIE Research Interpretation Project

After the completion of the ETS survey, NIE, charged with the responsibility of disseminating research findings, was faced with the traditional problem of getting information collected during research actually utilized by practitioners. NIE felt that this information needed to be interpreted for practitioners in order to be useful and that practitioners themselves did not have adequate time to interpret research. Additionally, NIE was interested in ensuring that the research be interpreted in such a way that it be useful to individuals working with specific youth populations, including Hispanic youth. In order to assure that the ETS findings would be interpreted by those familiar with research, counseling and the needs of Hispanic youth, NIE shared with the National Council of La Raza the cost of interpreting and disseminating these research findings in a way that would be useful to Hispanic youth. This model was based on the belief that the ultimate importance of research is heavily based on its usefulness to lay persons and practitioners and on NIE's hope that organizations such as NCLR will be actively involved in moving research findings into practical uses for the community which they represent.

C. NCLR's Project Design

Early in the process of examining the ETS final report, it became apparent that the report, in its original form, included no information on Hispanic students. None of the data in the student file had been disaggregated by ethnicity and the data in the school file had been presented only by school strata. Nothing in the ETS information provided any insight as to the particular experience of Hispanic students or the situation in schools with high Hispanic enrollments. Reviewer's materials prepared from that information would not have provided adequate information to individuals asked to interpret the research findings and their implications for Hispanic students. The need for an analysis which disaggregated data by ethnicity -- allowing comparisons between Hispanic, Black and White youth -- and by gender -- allowing comparisons between males and females in each ethnic group -- became more and more evident. The project advisory committee counseled that such an analysis was necessary in order to provide recommendations for Hispanic students. Thus, a two-tiered review strategy was designed to meet the need for both an independent analysis and a review based on those results as well as on the original ETS findings.
Field reviewers were identified based on the recommendations of the project advisory committee and individual responses to a call for reviewers placed in La Red (The Net), and the newsletter of the American Educational Research Association (AERA) Hispanic special interest group. Reviewers were selected to represent various Hispanic subgroups and geographic regions. Selected reviewers worked with Hispanic youth in a high school, community-based organization or university counseling setting, or were involved in conducting research on Hispanic youth. The reviewers were provided with the ETS survey results and asked to indicate whether those findings were applicable to their experience in working with Hispanic youth. They were also asked to indicate which results they thought needed further research. Meanwhile, in order to produce an analysis based on information about Hispanic youth, the National Council of La Raza purchased the data tape from ETS and, through NCLR's Hispanic Youth Employment Research Center, produced cross-tabulations of the student and school files, disaggregating data by gender and ethnicity. Reviewers were sent the results of this analysis and asked to describe the implications of these findings and make recommendations for improving career information based on the findings and on their own experience in working with Hispanic students.

III. TECHNICAL REPORT

A. Limitations of the Sample

NCLR conducted an analysis of the student file which disaggregated the student data by gender and ethnicity. School data were presented not by school strata but rather by the percentage of Hispanic students enrolled in the school. Although this type of analysis yielded some information about Hispanic students and schools with high Hispanic enrollments, several points must be kept in mind when drawing any implications from these data. First, the sample size for Hispanics is extremely small. Only 257 of the students sampled were identified as Hispanic, and up to 20 percent of this small sample may have been non-randomly selected. Furthermore, no data were collected in Puerto Rico, so information on a large number of Hispanic students is missing. The school file is similarly troubling since only 147 schools could be considered as having enrollments over 20 percent Hispanic. The small sizes of these samples resulted in extremely small cell sizes for certain questions, especially where substantial numbers of Hispanic students declined to respond. Therefore, extreme caution must be used in making generalizations from these data. The remarks of the reviewers were most important in attempting to check the validity of these findings, and their recommendations, presented further in this paper, are based both on these findings and on their own extensive experience in working with Hispanic youth.

The results from the ETS and the NCLR analysis of the student and school files are presented below. Results for schools with high Hispanic enrollments are the same as for all other schools unless specifically noted below.

9. School File

Research Question A1: What are the various types of career information resources currently available in secondary schools and what kinds of information do they contain?
All schools listed bound reference publications as the most common resources, followed by school-arranged experiences, and occupational briefs and kits. Least common resources were simulations, non-computerized sorting materials and computerized systems. Despite the relative unavailability of computerized resources, respondents generally agreed that they contain more information about other sources of information and offer the greatest opportunity for users to link self-appraisal with occupational information.

Schools with high Hispanic enrollments:

- Were more likely to have school-made materials, periodicals and civil service bulletins.
- Were slightly more likely than other schools to have school-arranged experiences, career days and speakers, career exploratory work experiences and volunteer services. They were slightly less likely to have job shadowing programs.
- Were more likely to have career information materials in Spanish. Just over half of schools with high Hispanic enrollments had these materials as compared to only 14 percent of schools with lower Hispanic enrollments.

Research Question A2: What is the quality of the information contained in the career information resources currently available in secondary schools?

Counselors indicated that they used a limited range of the resources available to achieve a wide variety of purposes. Top preferences were: state computer systems, Occupational Outlook Handbook, Guidance Information System, state or regional microfilm services, and Chronicle of Guidance Briefs. Counselors tended to rate these five resources as the most valuable. Schools with high Hispanic enrollments reported the same results.

Research Question A3: What types of schools have what types and quality of career information resources?

The data were inadequate to answer this question.

Research Question A4: What school staff are responsible for career information resources and what are their responsibilities.

Responsibility for specific management tasks related to career information:

The responsibility for management activities related to career information most often rested with the director of guidance staff. Exceptions to this were the responsibility for financial planning, for which administrators had greater responsibility; supervising work experience which was in many cases assigned to teachers or career education coordinators; and making available data on jobs held by former students, which was not formally assigned in 43 percent of the schools.
In schools with high Hispanic enrollments:

The coordinator of career education was almost twice as likely to have a role in planning major expenditures and librarians also played a slightly more significant role.

The role of the career education coordinator and career education staff was more pronounced in a variety of areas, including: helping students locate materials, arranging special career information programs and exploratory work programs, making available data on jobs held by former students, and deciding when to discard old materials. In almost all areas of responsibility, the coordinator of career education played a greater role in schools with high Hispanic enrollments than did the director of guidance.

Activities performed by professional counselors (state certificates in guidance):

In all schools, counselors reported that they were more likely to spend "a great deal of time" in directing students to information and answering specific questions than they are in interpreting the occupational information and assisting students in making career decisions.

In schools with high Hispanic enrollments:

- Counselors were less likely to be involved in almost all listed activities than in schools with lower numbers of Hispanic students;
- Counselors were more apt to direct students to information than to offer any interpretation of that information; and
- Fewer officials indicated that counselors were involved in assisting students with career decisions.

Reviewing Career Information:

Although most schools had designated an individual to review career information, only 26 percent had formal committees to do so. These committees were most likely to include counselors and teachers. Sources used for identifying career information were very similar regardless of the type of school and, in rank order, included the following sources:

1) Publishers' Catalogues;
2) Career Index;
4) Career Guidance Index; and
5) Guide to Local Occupational Information and Vocational Guidance Quarterly. (tied)
In schools with high Hispanic enrollments:

- These committees were slightly more likely to include librarians and local employers than were other schools. Students, however, were least likely to participate in these committees in schools with high Hispanic enrollments.

- These schools were more likely to use resources other than those specifically mentioned in the ETS questionnaire.

Research Question B3: What arrangements have schools made to provide students access to career information resources?

Access to publications:

Most schools indicated that the director of guidance and professional counselors had the primary responsibility for directing students to resources and helping them locate the information. The director of guidance was most often the person responsible for filing career information.

In response to almost all questions, schools with high enrollments of Hispanic students indicated that the director of guidance played a less important role than in other schools, and the career education staff played a larger role.

Access to computerized systems:

Only 463 schools in the sample had computer terminals and most had only one or two terminals. In most schools, students gained access to computerized systems on their own initiative, with assignments by teachers and counselors as alternate methods.

In schools with high Hispanic enrollments:

- More respondents reported that students were not scheduled for computer time at all than in schools with lower Hispanic enrollments.

- Fewer students were perceived as being able to use the computer without assistance. When provided, most assistance came from the counselors.

Access to audio-visual, microfiche, and non-computerized sorting materials:

In general, schools had more pieces of microfiche and audio-visual equipment than computer equipment. Students could access this equipment in a variety of ways in most schools, individually or via assignments by teachers and counselors. This equipment, however, was only used for 25 percent of the time it was available.

In schools with high Hispanic enrollments:

- Less counselor assistance was provided to students;
Referral by counselors was the most common method, despite the fact that most Hispanic students did not report that they sought or received such information primarily from counselors.

Access to Experiential Programs:

The responsibility for managing these programs rested most often with the director of guidance and guidance staff. Students were most commonly informed of these activities via: conferences with counselors, presentations to the student body, listings in course offerings, recommendations by teachers, and presentations to parents. Follow-up, when offered, was most commonly provided by conferences with counselors and teachers.

C. Student File

Research Question C1: How often are resources used by students? Does frequency of use vary by type of resource?

Reference books and magazines were the most frequently used resources, followed by pamphlets and job reports. Few students used job reports from former students. Of those who had access to computers, 50 percent had used the system. In schools where it was available, 43 percent of the students reported using microfiche. Students used their counselors most frequently as a career information resource and less frequently for information on occupations, preparing for occupations or where to get a job. Of experiential resources, most students reported having seen films or videotapes and least had engaged in simulations, had a job shadowing experience or participated in work-study programs.

For Hispanic students, the results were similar, with the following exceptions:

- Hispanic students, like White students, most frequently used reference books and magazines, followed by pamphlets and job reports. Hispanic females reported using these sources more often than Hispanic males. Although job reports from former students were less frequently utilized than other resources, Hispanic students were twice as likely as White students to use this information source.

- In schools where computers were present (only 25 percent of the schools), more Hispanic females than other students reported using the system. Hispanic females were more likely than Hispanic males to have used the computer, although Hispanic males were more likely than any other group to have used the computer many times. Hispanic females were also twice as likely as other groups to report that information was sometimes difficult to understand.

- In schools where microfiche was available, slightly more Hispanic students had utilized them than White students.
Where card-sorts were available, Hispanic students were more likely than Whites to have used them.

Hispanics reported talking with counselors about high school courses less frequently than other students. Hispanic females were the least likely to talk with their counselors about courses, and Hispanics were also less likely to talk with counselors about occupations in general. Hispanics were more likely than Whites and less likely than Blacks to talk with counselors about job preparation. Minority students, especially Black students, were more likely to talk with counselors about where to get jobs. In almost all cases, Hispanic males reported talking to their counselors slightly more frequently than did Hispanic females.

In general, minority group students were more likely to have participated in other career experiential activities such as simulations, career days, work-study or internships, job shadowing etc., than were White students. Black females were especially likely to have participated in almost all these activities. Substantially more Hispanics than Whites participated in these activities.

Research Question C2: How often are resources used by a student? Does frequency of use differ for different categories of students?

Frequency of Use by Students:

Students most frequently consulted parents or relatives for job information. They also reported using publications, individuals in the prospective line of work, teachers and counselors. Least frequently used resources were principals, employment service representatives, state employment representatives, microfiche, career clubs and school-arranged volunteer work experiences.

Hispanic students reported these differences:

When students identified an occupation that they were considering entering, Hispanic males reported consulting friends and parents with equal frequency, followed by teachers, someone in the field, friends outside school, and then counselors. Hispanic females reported consulting friends and teachers, followed by parents, someone in the field, counselors, and then friends outside school. The major difference between Hispanic males and females was the lower tendency of Hispanic females to consult parents and other relatives.

Hispanics were less likely to consult parents, counselors or someone in the field than were White students. Hispanics, however, reported consulting librarians, other school personnel, employment service representatives and others outside school more frequently than did White students. No special mention was made in the questionnaire about counselors from community-based organizations.
Of all the sources used by students to obtain information about an occupation, Hispanic students most rarely cited principals, microfiche, and state employment offices.

**Frequency of Use for Different Categories of Students:**

To obtain information on (1) educational and training requirements, (2) wages or salaries, (3) job security, (4) opportunities to help others, and (5) the usual activities of a worker on the job, the incidence of White students using parents or relatives was higher than average. White males particularly appeared to seek out parents or relatives for information pertaining to education and training and job security.

White students, particularly males, reported using computers for information about education and training more often than did other groups of students. Nonwhite students reported using the public library more frequently than did other student groups. Although there was some relationship between the type of student and the type of resource used, ETS concluded that it was not so pronounced that generalizations could be drawn.

For Hispanic students, the following different results were reported:

- Hispanic males generally consulted their parents less frequently than did White males but more frequently than Black males.
- Hispanic females were much less likely than any other group to obtain these kinds of information from parents and were likely to obtain career information from others employed in the field, teachers, books, magazines, pamphlets, and classes in career planning than were Hispanic males.
- Hispanic males and females obtained different types of information from their counselors. Males were more likely to obtain information on job security and helping others. Females sought information on job prerequisites, salaries, and usual job activities.
- Hispanic students did not report getting any information from microfiche, and few cited films, tapes, cassettes, computers, or other materials at school. Few students in general reported securing information from district or regional offices or state employment offices.

Research Question C3: For what purposes do students use these resources and what motivates those purposes?

Students most frequently used counselors to talk about high school classes; however guidance staff were also the most common informants for helping students locate general career information resources. Students reported that classroom teachers were the most common sources of information about career activities, but also utilized librarians as a resource for finding information. Students generally rated school newspapers, teachers outside their own classes and bulletin board displays, as the least effective informants.

Students reported that talks with parents or relatives followed by talks with friends most commonly motivated them to seek career information.
Although students reported that class assignments were the most powerful in-school motivator, schools perceived that talks with counselors and teachers and job site tours were most likely to motivate students.

Hispanic students reported the following differences:

- Although Hispanics also commonly talked about high school courses when they used counselors as a resource, Hispanic females were the least likely of any group of students to use counselors for this purpose. Both Hispanic males and females used counselors less than did White students.

- Hispanic students were more likely to talk with their counselors about where to get jobs than were White students. Hispanics, especially females, used counselors to talk about personal problems more frequently than did White students.

- Within the school setting, Hispanic students did not rely primarily on guidance staff to help them locate the school's career information resources as did White students. Hispanics, like most other students, cited classroom teachers as the most common source of information about career activities. However, librarians, career specialists, and friends were also important sources of information.

- Black and Hispanic students reported seeking information from librarians more frequently than did White students.

- Hispanic males were more likely to report obtaining information from posters, bulletin boards, and school newspapers than were other groups of students. These three sources of information were often listed as ineffective conduits of information for "average" students in the original ETS survey.

- Although both White and Black students were most motivated to seek career information by talks with parents, Hispanic students were equally motivated by talks with parents and talks with friends.

- Hispanic females were much less likely to seek career information as a result of talks with parents.

- Hispanics sought career information less frequently as a result of a class assignment than did either Black or White students and were more likely to look as a result of talks with counselors or others at school.

Research Question Q4: What specific kinds of information do students seek and obtain from these resources?

When obtaining occupational information from publications, computers, microfiche, card-sorts, and activities, all students most wanted to know about job prerequisites, earnings and salaries, and job activities. Computers were utilized more frequently than other resources to obtain information about earnings and outlook.

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Female students in general were more apt to look for information on job satisfaction, although Hispanic females sought this information less frequently than did other groups of women. Hispanic males and females were less likely than any other group of students to be looking for information on job outlooks in the 1980's.

Research Question Q1: What resources do students use in career planning in addition to the resources of the school?

Approximately one-third of all schools reported that career resources are available to students at locations external to the school, and most reported that these centers have fewer resources and are maintained by some agency of the state. Most students indicated that contacts outside the school are a motivator to look for occupational information and that information comes from a variety of resources both in and out of school. Hispanic students were no exception, and more than 50 percent of Hispanics reported using outside contacts for information.

Research Question Q2: How frequently do students use these additional materials as compared to their use of the school's resources?

Students in all types of schools reported utilizing external resources more frequently than in-school resources. Fifty-five percent of students reported that they had talked many times with parents or relatives; 48 percent reported many conversations with friends. Only ten percent reported many conversations with counselors and only seven percent with teachers.

Hispanic students differed in the following responses:

Although Hispanics were more likely than either Blacks or Whites to talk to their friends about jobs at least once or a few times, Blacks and Whites reported talking to their friends about jobs more consistently than did Hispanics.

Hispanic males did not report consulting their parents about jobs as often as Blacks or Whites. This pattern was even more pronounced for Hispanic females.

Black and Hispanic males especially Blacks, were more likely to use counselors as a resource about information for jobs than were Whites. In contrast, White and Black females were more likely to turn to counselors as an occupational information resource than were Hispanic females.

Hispanic and Black males reported turning to teachers for occupational information to a greater extent than did Whites. This was especially true for Hispanics. Black and White females, especially Blacks, were more likely than Hispanic females to use teachers for occupational information.
Black and White students were more likely than Hispanics to talk to working people about jobs.

Black and Hispanic students were more likely than Whites to talk to former students about jobs.

Minority students, especially Blacks, were more likely to talk to state employment counselors, college admission officers and armed forces recruiters about occupations than were Whites.

Black and Hispanic students were more likely to have utilized state employment offices and regional career centers than White students. Hispanic females were particularly likely to have utilized the regional centers.

Black and Hispanic students were more likely to have gone to a private employment agency and to have utilized a local college for information than were White students.

When asked if all the necessary occupational information was available from the school, Hispanic females were more likely than other groups to indicate that it was. Hispanic males were more likely than other groups to be unsure of whether adequate information was available.

## IV. REVIEWERS' RECOMMENDATIONS

The 12 field reviewers selected to interpret the survey results were asked to discuss the implications of the research findings, and also to make recommendations, based on this information and their own experience, as to how career information services for Hispanic youth could be improved. Although all reviewers agreed that a number of measures could be taken to make career information services more effective for Hispanics, in many cases it was not clear who the reviewers thought should be responsible for effecting change; further attention needs to be given to how these recommendations could be implemented. Recommendations for changes in career information systems fell into four basic categories, listed here in order of most frequent mention:

1) The structure of career information systems and delivery of services;
2) The role, training and selection of counselors;
3) The types of materials and resources selected; and
4) The type and degree of parental involvement.

Reviewers also indicated areas needing further research as a basis for design of career information systems responsive to Hispanic youth.
The reviewers' recommendations are described below, by category.

A. The Structure of Career Information Systems and Delivery of Services

The majority of recommendations for improving career information and counseling for Hispanic students involved changes in the structure of the programs in the schools and the way in which services were delivered. While over 80 separate recommendations of this nature were submitted, all were concerned with the following five features of the structure of career programs:

- Teaching and counseling methodologies used with Hispanic youth;
- Integration of the career education program with other school curriculum and activities;
- Content of career resources and type of information disseminated;
- Linkages of the program with parents, community members and community-based counseling organizations; and
- Number of staff and amount of financial resources devoted to the project.

Reviewers recommended that career programs designed for Hispanics use information gained from research and experience to capitalize on the strengths of Hispanic students. There were numerous recommendations that less reliance be placed on independent use of written materials and more emphasis on personal, verbal interactions with counselors or career education staff. Reviewers also mentioned increased use of group interaction and small group discussions as effective tools. Although reviewers voiced the belief that Hispanic students need to be better able to utilize computerized resources, they also pointed out that absent training with computers, even limited computer resources will be under-utilized. Reviewers recommended use of more audio-visual materials and hands-on experience, and there was a consistent call for methodologies which are appropriate for the specific skills and needs of the students to be served.

Reviewers consistently recommended that the career education program be better integrated into the overall curriculum of the school and that the entire school community be involved in some way. Specific suggestions for accomplishing that goal included: making sure that all teachers receive some training in career education, requiring integration of career education into classroom lessons, expanding the career education "team" to include teachers and administrative staff, and involving students in the planning process. Reviewers also questioned the wisdom of waiting until high school to begin career education programs and suggested that elementary schools explore adding a career education component to their curriculum.

The lack of parent, student and community involvement in career education programs was of great concern to reviewers, and there were many recommendations that programs be structured to include parents as active participants. There were several suggestions that any program designed for Hispanic youth include a training component for parents and community-based
In order to effectively involve many Hispanic parents, reviewers felt that training activities and materials must also be available in Spanish. Reviewers also recommended to Hispanic organizations that they make career education a top priority and develop ways to be better informed and involved in the process.

The final type of recommendation to change the structure of career education programs involved urging that increased financial and personnel resources be devoted to these programs. Although reviewers were well aware of the financial constraints faced by most school districts, the general feeling was that career education was of such importance that fiscal priorities should be re-evaluated with an eye to increasing the funds allocated to career education. Some reviewers recommended that all those interested in improving career education opportunities for Hispanic youth become more active advocates for increased education funding at the local, state and federal levels.

B. The Role, Training and Selection of Counselors

All reviewers affirmed the research findings citing the important role traditionally played by high school guidance counselors in providing career information to high school students. In their experience, counselors played key roles in providing or not providing career information to Hispanic students. Reviewers mentioned concerns arising from the limited number of Hispanic counselors and the fact that few counselors have the language skills necessary to effectively communicate with limited English proficient Hispanic students or parents. Aside from the characteristics of counselors, major concerns were raised about inadequacies in counselor preparation and inservice training. Reviewers were almost unanimous in their recommendation that training curriculum for new counselors be designed to prepare them to work with Hispanic students and that current counselors be provided with inservice training to upgrade their knowledge about Hispanic students. The third major theme in recommendations about counselors concerned the way in which counselors seemed to offer career education services and their resulting under-utilization by Hispanic students. Based on the information provided by the ETS survey and on their own experience, reviewers felt that the passivity of counselors was of great concern.

Reviewers frequently mentioned the lack of Hispanic counselors and recommended that more Hispanic counselors be trained by institutions of higher education and hired by school districts. Several reviewers mentioned that students would feel more at ease with counselors who had an understanding of their culture and background and an ability to communicate with them and their parents in Spanish. Other reviewers recommended that in addition to the need to hire more Hispanic staff, there was a parallel need for more bilingual staff, Hispanic or non-Hispanic.

In the experience of reviewers, most guidance counselors were generally unprepared to deal with Hispanic students, having received no training which dealt with counseling students from different cultures. One reviewer mentioned that in many cases the average counselor was trained in a certification program containing no information about Hispanics or any other minority group. These counselors were generally felt to be ignorant of the Hispanic students' culture, values, environment and special career education needs. Additionally, reviewers were concerned about negative stereotypes
which counselors, uneducated about Hispanics, might hold. Therefore, reviewers recommended that institutions of higher education, state certification agencies, and local school districts require counselors to have some sort of training in dealing with Hispanic students, and that such training be a part of an inservice training program for current counselors. There was also a strong feeling that counselors need to be trained to use more active and assertive strategies in dealing with Hispanic students rather than traditional, more passive styles of interacting with students, and that they need to involve their parents and community-based organizations.

Since counselors traditionally play an important role in selecting high school classes, and students eventually have to go to counselors for any postsecondary plans, the fact that Hispanic students do not seem to view their counselors as resource persons, and are less likely to seek information from them than are other groups of students, was cited by many reviewers as a cause for concern. Reviewers were also concerned by the finding that counselors appear to direct students to resources much more frequently than they interpret those resources for students. One reviewer commented that: "The role of the counselor is not one of directing traffic...but is one of assisting [the] student to interpret and make proper career decisions." Reviewers felt that responsible school personnel must do more than direct students to the information; they must provide interpretation and guidance.

Reviewers recognized that counselors are likely to be overworked and inadequately informed and trained regarding new materials and opportunities for students. Reviewers acknowledged that in schools with an individual or staff primarily responsible for career information resources, counselors seem to be better informed, and recommended that counselors routinely be given the time and opportunity for inservice training by such well-informed personnel. Staff support from other individuals was seen as important in improving the effectiveness of the counselors.

Reviewers recommended more integration of the role of guidance counselors with career education staff and with the use of written resource materials. Some reviewers felt that a career education specialist should be employed in each school to coordinate career education services and better define the role of the counselor. Many reviewers voiced the frustration of not being able to hold counselors accountable for their apparent lack of assistance to Hispanic students and recommended tighter controls and monitoring by administrators, career education staff, and students of the activities of the counseling staff. Throughout each recommendation for improving the role of counselors was the call for counselors to become more active and assertive in the ways that they disseminate career information.

C. The Types of Materials and Resources Selected

Without recommending specific career education materials, reviewers also had a number of comments and recommendations about how materials more appropriate for Hispanic students might be selected. Most reviewers felt that at least some career information materials in Spanish should be available in all schools with Hispanic students. They were also concerned that these materials provide information which was up-to-date, professionally prepared, and culturally sensitive. They felt it very important that a school's career education materials contain information on non-traditional
careers. Reviewers suggested that school programs check with individuals in the private sector to ensure that materials are relevant and reflect the current job market.

With regard to the content of career counseling programs and the type of information being provided, reviewers recommended that all information be based on updated studies of the job market trends and include extra information on non-traditional and high-technology careers. Some reviewers also called for the expansion of career information to include teaching job seeking and interview skills. Aside from the recommendation that some career counseling activities and materials be available in Spanish, the most frequent suggestion was that the content of career activities reflect an emphasis on career guidance rather than simply career information.

In order to ensure that the most relevant materials are selected, several reviewers recommended that materials review committees be created to select and periodically update materials. These committees would include career education, guidance and teaching staff, students, parents and members of the business community.

D. The Type and Degree of Parent Involvement

Most reviewers' experience matched the ETS findings that parents of Hispanic youth tended to be less involved in career decisions and were perceived as less of a source of career information than were the parents of Black or White youth. All reviewers saw the need to provide more information effectively in the career education process. While most reviewers called attention to the need to increase the awareness and involvement of Hispanic parents, few offered concrete suggestions for expanding outreach to parents. Several reviewers recommended that any career education program for Hispanic students also include a training component for their parents so that parents would be similarly well-informed about career information. These individuals called attention to the fact that serious efforts to involve parents would mean scheduling training sessions at times convenient to parents, including evenings and weekends, conducting some training and outreach activities in Spanish, and providing some bilingual career education personnel.

E. Recommendations for Further Research

Most reviewers prefaced their comments on the ETS survey with the caution that the Hispanic sample size and the types of information collected were really inadequate to provide much information about the national status of career counseling and Hispanic youth. Many felt that additional research, specifically geared to investigating the effectiveness of these programs for Hispanic students, was necessary. Those offering concrete suggestions for a research agenda indicated the need for further study in the following areas:

- The role of counselors and the effect of few minority counselors;
- Relationships between Hispanic students and counselors;
- Study of services provided by community-based organizations;
- Role of Hispanic parents in shaping career decisions; and
- Characteristics of Hispanic youth, including those living in Puerto Rico, as compared to Black and White youth.
There was strong interest in additional research about the role played by counselors. Reviewers were concerned that there are very few Hispanic counselors and recommended studies to learn more about the effects of the shortage of Hispanic and bilingual counselors. Additional study was recommended on the relationships between Hispanic students and counselors, and on the reasons why Hispanics do not regularly talk to their counselors or view them as a major resource for career information.

Since many reviewers had practical experience in working with community-based organizations (CBCOs), there was strong interest in information about the additional career counseling services often provided by these organizations. Unfortunately, the ETS study contained no information about the role of community-based organizations or student's perceptions of their effectiveness. Reviewers recommended that any research agenda include the need to study the services provided by community-based organizations, their effectiveness, and whether schools could step in and provide these services in their absence.

The role which Hispanic parents play in shaping the career decisions of their children was an additional area earmarked as in need of further research. Although reviewers had differing experiences as to the degree of parental involvement in this process and were largely unaware of other research focusing on this area, they felt that often parents and other family members are the youths' prime motivators to attend college or to take a specific job. The need for research which examines the differing ways in which Hispanic males and females utilize family members and receive career information was also highlighted. Some information on this subject could be obtained from secondary analyses of Hispanic subsamples in such major data bases as the National Longitudinal Survey and the High School and Beyond Survey.

Reviewers recommended research which would provide specific information about Hispanic youth, including those living in Puerto Rico, and would allow for comparisons with White and Black youth. Reviewers were concerned that additional research be conducted with nationally, representative samples to allow for more reliable generalizations and that research be conducted and data tabulated in such a way as to allow for the disaggregation of data by gender and ethnicity. Comparisons among members of various Hispanic subgroups and among Hispanics living in different geographic areas were also cited as important.

In conclusion, most reviewers affirmed the fact that the ETS survey showed that there were questions about Hispanics and their use of career and occupational information that needed to be answered. It did serve to call attention to the need for additional studies to examine the career education needs of Hispanic students, the effectiveness of current systems of career education for this specific population, the role of their parents and community-based organizations and the changes necessary to improve career education for Hispanic students.
V. SYMPOSIUM RECOMMENDATIONS

The National Council of La Raza held a special seminar at its 1982 National Affiliate Conference in Los Angeles to discuss the findings from this project. Because many of the 50 participants were representatives from community-based organizations (CBOs), educators and community members, much of the discussion focused on strategies which community groups and individuals could pursue to improve career education. There were also a substantial number of corporate representatives present and the conference theme, "Hispanics and the Private Sector -- New Partnerships/New Initiatives" stimulated a discussion of ways to involve the private sector in efforts to improve career education systems for Hispanics. In addition to NCLR staff, and board members, seminar panelists included Los Angeles-area field reviewers Dr. Dan Romero, Director of the Counseling Center at the University of California, Irvine and Mr. Richard Veloz, Senior Health Educator at the East Los Angeles Child and Youth Clinic. Mr. Joe Baca, Community Affairs Representative for General Telephone Company of California and Member of the Board of Trustees of the San Bernardino Community College District spoke as an invited guest.

Several common themes emerged from the discussion on the project findings and recommendations, perhaps the most common being the feeling that the Hispanic community simply cannot rely on counselors alone to provide adequate career education opportunities for Hispanic youth. Information indicates that there are too few Hispanic and/or bilingual counselors and that other counselors have not received adequate training to deal with culturally different youth. Additionally, the ETS data revealed that counselors pursue rather passive strategies, waiting until the youth seek them out for information, which Hispanic youth infrequently do. Seminar panelists urged that communities bring their resources to bear in addressing the problems of inadequate career education. Individuals and organizations were advised to make this a priority immediately and pursue active rather than passive strategies for reaching youth.

Participants recommended that CBOs take the initiative in forming a three-way partnership between community organizations, businesses and schools to improve career education. Since the resources of each may be inadequate to fully address the problems, all available resources must be utilized. Panelists pointed out that community groups often have substantial resources which are not commonly recognized, with special skills in a variety of areas and tremendous resources in the individuals affiliated with the organization. Community members can provide important professional role models for students, and community groups can be the catalyst in enlisting the support of local businesses as sites for job shadowing experiences and work experience programs. Community groups also often have experience in fund raising and leveraging local business contributions, which local school officials do not, and can be helpful in arranging cooperative projects. Whatever the specific strategy which community groups choose to implement, panelists and participants alike recommended that it be an active strategy, involving both businesses and schools and taking into full consideration all the resources at the community-based organization's disposal.
The need for additional research was once again highlighted. In addition to previously raised research concerns, this discussion focused on higher education issues, and the need to prepare more Hispanic counselors, improve the training available to all counselors, and increase the numbers of Hispanics in careers and professions where they have been historically under-represented. Dr. Romero offered a preliminary research agenda on these issues and suggested that other areas, such as the career education needs of Hispanic adults and the role of large corporations in career development and enhancement of Hispanic employees, also need further study.

VI. NCLR RESPONSE

Career education and concern about the school-to-work transition have long been an interest of the National Council of La Raza. Through a variety of research, direct service and advocacy projects, NCLR has been working in this area for almost 15 years. Information obtained from this project and questions and recommendations raised by field reviewers and other project participants have highlighted once again just how much remains to be done to improve career education opportunities for Hispanics. NCLR continues to believe that Hispanic community-based organizations have an important role to play in bringing about those changes.

NCLR will continue to work with affiliated organizations in the following ways to improve career education for Hispanics:

A. Policy Analysis - NCLR will continue to monitor federal career education policy, research and funding. In addition, NCLR is collecting information about innovative career education programs operated by Hispanic community-based organizations. NCLR is also examining career education and training projects initiated by private industry. A network of NCLR affiliates working in education have already been established; and a monthly newsletter to share information on common concerns and successful programs. Future editions of the newsletter will feature the results of the NCLR analysis of the ETS study and profiles of innovative career education programs run by network members and private industry.

B. Advocacy - NCLR works cooperatively with organizations and coalitions concerned about adequate funding for education programs and education research to ensure that Hispanic education concerns, including career education and research, are addressed. NCLR also works with a variety of educational associations, to help them become more aware of the educational needs of Hispanics. Via "Action Alerts," NCLR network members are encouraged to communicate their concerns to these associations, members of Congress and officials of federal agencies as consistent with requirements for 501(c)(3) tax-exempt organizations.

C. Direct Services - Through subcontracts to two affiliates, NCLR runs Project Salud, a career education project designed
to prepare Hispanic high school students to pursue health careers. This project currently serves some 220 youth in two sites and is in its third year of operation. The project has a 95 percent success rate and has served as the model for a project designed to prepare students for careers in math, science and engineering.

D. Research - Several research reports utilizing the High School and Beyond (HS&B) and National Longitudinal Survey of Labor Force Participation (NLS) and focusing on the school-to-work transition were prepared by NCLR's Hispanic Youth Employment Research Center. After the Department of Labor release the reports, findings will be circulated to the NCLR network. NCLR's Research Center maintains the HS&B, NLS and the ETS Career Information Survey data tapes in its library. The tapes are available for further analysis.

E. Public Education and Information Dissemination - NCLR is sponsoring a session at the national conference of the National Association for Bilingual Education (NABE) focusing on the important role which community-based organizations can play in partnership with public school programs serving Hispanic youth. A similar session will be presented at the 1983 NCLR Affiliate Conference, along with an update on career education.

NCLR has also initiated discussions with several corporations and foundations about securing funds for career education projects. Proposals have been developed for Projects Alpha and SUCCESS. Project Alpha is designed to utilize the successful Salud model to prepare high school students for careers in math, science and engineering. The project would be run by NCLR community-based affiliates in four sites. Project SUCCESS (Special University and Career Counseling Experiences Secure Success) is a five-year academic and career counseling project designed to identify Hispanic students beginning in junior high school and follow them through high school graduation. It is part of a National Hispanic Talent Development Program being developed by the College Board. This early intervention program is designed to increase the number of Hispanic students academically prepared for and interested in going to college. Personal, academic and career counseling, career exploration activities, computer training and access and parental involvement are all integral parts of Project SUCCESS. Finally, NCLR is discussing with a major corporation a career education demonstration program for use with community-based organizations. That proposal is currently being developed. Securing funding for these projects is a high priority for the coming year.

This report and subsequent articles and monographs on career education will be disseminated throughout the NCLR network and shared with other national and local Hispanic organizations, and with other members of the education and business communities. Improving the type of career education opportunities available to Hispanic youth and ensuring that Hispanic community-based organizations have the skills and information necessary to participate fully in this process will remain an important priority and work area for the National Council of La Raza.
The opportunity to study the ETS Survey of Career Information Resources in Secondary Schools, disaggregate the data by ethnicity and gender, and discuss the results with a highly skilled group of practitioners provided some important new information on the state of career education programs and the extent of their effectiveness for Hispanic youth. It is unfortunate that the absence of data from Puerto Rico, the small cell sizes from schools with high Hispanic enrollments and the fact that the student sample is not nationally representative limit the ability to draw national implications from these data. However, it does represent information from a large number of schools and students, and when coupled with the recommendations of professionals working with Hispanic youth in career education situations, can provide very useful information.

The ETS data, when disaggregated by ethnicity and gender, did indicate that Hispanics tend to have a different experience with career education than did White and Black students. The student file indicated that Hispanic students, male and female, tended to use school counselors and parents less as sources of information than did other students and that Hispanic females were particularly unlikely to seek information from these sources. The responses also indicated that Hispanic youth were more likely to turn to teachers, friends, and outside-school resources for job information than were White youth. Additionally, Hispanic students reported seeking slightly different kinds of information even when they utilized the same sorts of resources. The school file indicated that schools with high Hispanic enrollments were more likely to have directors of career education and to give these individuals more responsibility for most aspects of career education. Counselors in these schools also reported that they were more likely to direct students to information than offer interpretation or guidance. These schools also seemed to have more school-made materials and less access to computer terminals than did other schools. Finally, although only half of the schools with high Hispanic enrollments reported having career education materials in Spanish, these schools were much more likely to have such materials than were other schools. Despite the limitations of the sample, there appeared to be consistent differences in the responses of both Hispanic students and schools with high Hispanic enrollments.

Most of these results were echoed by the field reviewers, who all felt that career education programs could be changed substantially to better serve Hispanic students. Recommendations were made in the following areas, listed in order of most frequent mention:

- Changes in the structure of career information systems and delivery of services;
- Changes in the role, training and selection of counselors;
- Changes in the types of materials and resources selected; and
Changes in the type and degree of parental involvement.

Many of these recommendations were echoed by symposium participants, who also urged that Hispanic community-based organizations take the initiative in forming partnerships with schools and local businesses to improve career education opportunities in local communities.

It was also clear to both field reviewers and symposium participants that much additional research needs to be done, using nationally representative samples and disaggregating data by ethnicity and gender, before the many questions raised by the ETS survey can be properly answered. Still, the ETS survey, the opportunity to disaggregate the data and discuss its implications with field-based experts represent an important step in developing new strategies to improve career education opportunities for Hispanic youth.