Results are presented of an initial synthesis of literature based on work conducted in the area of vocational education equity for persons discriminated against on the basis of racial and ethnic identity, sex, and handicapping conditions. (The literature base is composed of 1,357 items obtained from searches of the ERIC database, the Vocational Education Program Improvement database, and from the publication, "Resources and References for Sex-Fair Vocational Education.") Two matrices are provided: the first including publications addressing the three special populations individually, and another including publications addressing two or three of the populations in one document. Summaries are provided of the document analyses for the three equity areas, and recommendations for research and development are made. A summary of the initial synthesis cites these findings: vocational education neglects to deal with racial and ethnic minority groups, materials are targeted mainly to school personnel, and little emphasis is placed on topics requiring involvement of people outside the educational system. Thirty-five goals, developed by a technical panel, are listed in order of priority. Seven bibliographies are appended: (1) racial/ethnic minority equity, (2) sex equity, (3) handicapped equity, (4) racial/ethnic minority/sex/handicapped equity, (5) racial/ethnic minority/sex equity, (6) racial/ethnic minority/handicapped equity, and (7) sex/handicapped equity. (YLB)
EQUITY AND VOCATIONAL EDUCATION: 
AN INITIAL SYNTHESIS OF PROGRESS 
AND RECOMMENDATIONS FOR THE FUTURE

Louise Vetter
Patricia Worthy Winkfield
Rodney K. Spain
Maureen E. Kelly

The National Center for Research in Vocational Education
The Ohio State University
1960 Kenny Road
Columbus, Ohio 43210

1982
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- Developing educational programs and products
- Evaluating individual program needs and outcomes
- Providing information for national planning and policy
- Installing educational programs and products
- Operating information systems and services
- Conducting leadership development and training programs
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Legislation and social change have increased vocational educators' concerns with issues of equity. This document reports an initial analysis of documents available in the vocational education literature relating to equity for persons discriminated against on the basis of racial/ethnic identity, sex, or handicap. Goals for equity in vocational education, developed by the technical panel after reviewing the document analysis, are included in the report.

In addition to the authors, the National Center is indebted to the individuals who served on the study's technical panel. The panel was composed of Nancy Evans, Ohio Division of Vocational Education; Barbara Kemp, Office of Vocational and Adult Education, U.S. Department of Education (retired); Beverly Postlewaite, Washington Commission for Vocational Education; Samuel Proctor, Rutgers University; Gary Ridout, North Carolina State Division of Vocational Education; and Alan Sheppard, Virginia Polytechnic Institute and State University. In addition to the reviews by the technical panel, this document was reviewed by Audni Miller-Beach and Patricia Arthur, both of the National Center. Special thanks go to Lucille Campbell Thrane, director of the division in which this study was conducted. Jeannie Thomas' excellent clerical skills and the editorial assistance of Connie Faddis and Janet Kiplinger are also appreciated.

Robert E. Taylor
Executive Director
The National Center for Research
in Vocational Education
EXECUTIVE SUMMARY

This initial synthesis of the materials identified through searches of the ERIC database and the Vocational Education Program Improvement Data Base, provides a quantitative picture of equity in vocational education. Documents identified through the database searches were classified by topic covered and by target population, and arranged into two-dimensional matrices. Because of time and resource constraints, no attempt was made to determine the quality of the materials. Also, the synthesis was limited to materials relating to the three special populations specified by the Office for Civil Rights (OCR) Guidelines: persons discriminated against on the basis of racial/ethnic identity, sex, or handicap.

Findings

Only 5 percent of the 1,357 items included in this study dealt with more than one of the three special population groups. This observation probably reflects the funding patterns within vocational education. It may also be a reflection of a situation where persons who are proposing and implementing projects and programs are basically only concerned about equity as it relates to one particular group. However, in this era of cutbacks in funding in vocational education, we may need to be more concerned about how to implement programs and projects that consider the needs of a range of the special population groups.

Another observation from the items included in this study is vocational education's negligence in dealing with the special population of racial/ethnic minority groups. Again, this may reflect funding patterns within vocational education, as research and development programs for these groups may not have had the benefit of funding priorities to the same extent that the other groups have had. But if the number of existing vocational education materials are used as a yardstick, vocational education needs to pay considerably more attention to equity for racial/ethnic minority groups.

In general, it appears as though materials in equity are targeted to most relevant school personnel on topics that relate directly and almost exclusively to education. The one exception, in terms of target audience, is teacher/counselor educators, for whom very few items were identified.

Although materials for school personnel seem plentiful, few equity materials appear to exist for people outside the educational system. That is, very few items for employers, advocacy groups, and significant others (parents, spouses, peers) were identified. Other potential target populations, such as labor union personnel, volunteers, advisory committee members, and
school board members, were not represented at all in the items that were reviewed.

In addition, the materials identified seldom dealt with topics, such as employability/survival skills, job placement, followup/followthrough, and community relations, that require at least the partial involvement of people outside the educational system. Other emerging topics, such as productivity, reindustrialization, high technology, and the ergonomic costs of equity, were not represented at all in the materials reviewed.

Since school systems operate within the larger community and since the goal of vocational education is to prepare students for successful employment, it seems reasonable that efforts should be made to expand the scope of equity programming and projects to include the wider community. The preparation of materials targeted for people other than school personnel and on topics related to the wider community would be a step in that direction.

**Equity Goals**

A six-member technical panel reviewed the initial synthesis presented in this document. The panel then developed a listing of thirty-five goals for equity in vocational education, using a modification of the Nominal Group Technique. After the technical panel had developed the listing, the members rated the goals in terms of importance. The rating scale ranged from 5 (most important) to 1 (least important). The goals are listed here, in order of priority, with the average rating given by the technical panel in parentheses following the goal.

- Synthesize and disseminate currently available information and materials. (5.00)
- Describe and share effective ways to communicate with employers to encourage the hiring of men and women, minorities, and handicapped people in nontraditional jobs. (4.83)
- Employ greater numbers of minorities, women, disadvantaged and handicapped persons in key leadership and supervisory roles in vocational education, especially at state and federal levels. (4.83)
- Infuse equity into all areas of the vocational education delivery system. (4.67)
- Create in vocational education personnel a greater sensitivity and understanding of equity concerns, including preservice and inservice education. (4.67)
• Provide greater access for women, minorities, the disadvantaged, and handicapped to quality vocational education programs. (4.67)

• Research how state and local administrators perceive the problems of equity. (4.67)

• Modify lengthy research and development (R&D) reports into short, to-the-point, easy-to-follow publications for specific target audiences. (4.67)

• Develop more support systems for students in nontraditional programs to get nontraditional jobs. (4.50)

• Provide more attention to the needs of adults; for example, refugees, incarcerated persons, illiterates, and older people. (4.33)

• Utilize state evaluation procedures (e.g., civil rights reviews and program evaluations) to document equity changes and needs. (4.33)

• Develop and disseminate materials for target populations to enable them to enter and succeed in more highly skilled areas (high technology). (4.17)

• Expand students' perceptions and options in work roles, family roles, and personal development. (4.17)

• Target vocational education funds to inner cities with a high density of minority/disadvantaged youth. (4.17)

• Understand and seek support from advocacy groups. (4.00)

• Provide for more collaboration between prevocational and vocational education for better basic preparation and clearer career expectations. (4.00)

• Provide intensive programmatic efforts to bring about greater respectability and acceptability of skilled labor to vocational education students. (4.00)

• Research the efficacy of R&D to bring about changes. (4.00)

• Coordinate with other educators dealing with the same population groups. (3.38)

• Research trends (i.e., Where should we be in equity in 1990?). (3.83)

• Provide greater integration of equity perspectives for development efforts. (3.83)
• Investigate research on changes in family life resulting from women entering the paid labor force. (3.83)
• Provide greater integration of equity perspectives for data collection. (3.67)
• Include all equity concerns (i.e., access and opportunity) as a single unit. (3.67)
• Research the personal benefits of sex equity for men. (3.33)
• Study the attitudes of minority youth toward the "culture of success" and their chances (e.g., Is there a sense of futility?). (3.33)
• Research trends in formal policies and procedures regarding equity in schools. (3.17)
• Describe ways that vocational education can keep disadvantaged and minority youth from dropping out of school. (3.00)
• Investigate research on changes in family life resulting from men entering the household work force. (3.00)
• Provide mechanisms and support strategies that enhance the chances of job success of handicapped persons. (2.67)
• Study salary differences in comparable jobs by sex, racial/ethnic group, and handicap. (2.50)
• Research demographic differences on issues of equity. (2.50)
• Identify the factors that cause local education agencies to see equity as a priority issue. (2.33)
• Investigate the opportunities of military recruits for vocational education. (2.33)
• Research the characteristics of the people who make policy for vocational education (e.g., socioeconomic status, age, race, sex, educational background). (1.67)
INTRODUCTION

The goal of vocational education is to provide skills and knowledge to students so that they can succeed in employment. Equity in vocational education can be defined as the fair and just treatment of all members of society who wish to participate in and enjoy the benefits of vocational education.

Equity issues have been important in vocational education from its earliest days. In 1914, the Commission on National Aid to Vocational Education stated:

The social and educational need for vocational training is equally urgent. Widespread vocational training will democratize the education of the country ... by recognizing different tastes and abilities and by giving an equal opportunity to all to prepare for their life work. (Commission on National Aid to Vocational Education, 1914, Vol. 1, p. 12)

Federal initiatives on equity in employment and education in the 1960s and 1970s focused this concern for vocational education. The Education Amendments of 1976 (under which vocational education is currently operating) specified equity goals. In March 1979, the Office for Civil Rights (OCR) of the Department of Health, Education, and Welfare issued Guidelines for Eliminating Discrimination and Denial of Services on the Basis of Race, Color, National Origin, Sex and Handicap for vocational education programs.

These mandates for access to programs and opportunities in vocational education over the past decade, and the work conducted to achieve these vocational education equity mandates, led to this study. The purpose of the study is to provide an initial synthesis of work conducted in the area of vocational education equity. In this way, gaps in the literature base can be identified, and goals for research, development and leadership development can also be determined.

This publication presents the results of the initial literature synthesis and the goals that were subsequently identified.

Reference

PROCEDURES

Although vocational education deals with a large number of "special populations," this study is limited (due to time and resource constraints) to looking at the three special populations specified by the OCR Guidelines: persons discriminated against on the basis of racial/ethnic identity, sex, or handicap. Procedures for identifying and synthesizing the research and development work that has been done in vocational education in these three areas are delineated below.

Literature Base

Computerized searches of the ERIC database and the Vocational Education Program Improvement Data Base were conducted in February 1982. The ERIC search yielded 754 items. Six hundred items were obtained from the Vocational Education Program Improvement Data Base. An additional 530 items for consideration were obtained from a compilation developed by Far West Laboratory for Educational Research and Development in August 1981, entitled Resources and References for Sex-Fair Vocational Education.

Matrix Development

Abstracts and annotations were read to determine if the items were appropriate for this study. Items that did not relate specifically to vocational education (such as special education, rehabilitation services, or women's studies) were eliminated. Items relating to non-United States populations were also eliminated.

The 1,357 items that remained were cross-tabulated into matrices by topic and target population, based on the information available in the abstract or annotation. For the items retrieved from the Vocational Education Program Improvement Data Base, the target population utilized was the one the abstracter had selected. When several target populations were identified for a document (e.g., teachers, counselors, and administrators) or when the target population was identified as "vocational educators," the item was classified in the "professional personnel" category. The target population identified as "significant others" included parents, spouses, and peers.

Only the topics and target populations for which items could be categorized are included in the matrices. Thus, such newly emerging topics as productivity, reindustrialization, and high technology are not included, nor are such potential target populations as labor union personnel and volunteers.
Two matrices are presented on the following pages. The first matrix includes the 1,282 items that related to only one of the three special population groups (racial/ethnic minorities, sex, handicap). The second matrix includes items that related to two or three of the special population groups. Seventy-five items are included in the second matrix.

Bibliographies of all the items included in the two matrices appear in Appendices A–G.
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*R = Racial/Ethnic Minority, S = Sex, H = Handicapped, T = Total
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Blacks, Native Americans and Hispanics comprise the three major racial/ethnic groups reviewed for this minority summary. Although the groups themselves have had separate experiences with regard to equity, the major conclusion that can be drawn from literature reviewed is the same: racial/ethnic minorities have been underserved by vocational education.

The search revealed only 104 documents that could be classified as dealing with racial/ethnic minorities, equity, and vocational education. More than half dealt with either skill training or basic skill programs for these populations, and were targeted toward students or teachers. However, some resources reviewed dealt with wider social issues such as planning and policymaking, the development of positive attitudes and awareness of minority groups, barriers to success, desegregation, access to training, and dissemination. The remaining documents dealt with program evaluation, support services, and student assessment.

Although many minorities appear to have greater access to vocational education programs, this does not automatically mean that they have equality of educational opportunity in a particular vocational area. This kind of judgment can probably be made only after sufficient information has been obtained to answer the following types of questions raised by N. Alan Sheppard (1982):

- In what occupational areas are minorities generally enrolled?
- Is there a high degree of correlation between the vocational or occupational areas in which minorities are enrolled and available job opportunities?
- What is the employment status of minority graduates after they have completed their vocational programs?
- What is the status of minority graduates with respect to placement in the field for which trained?
- What kind of jobs do minority graduates get when they do not obtain jobs in the field for which trained?
- Is the level of funding adequate for programs in which minorities are enrolled?
- To what extent are minorities policymakers and implementers in vocational education?
Do minorities, in general, perceive vocational education as a viable educational option?

A study of literature related to the above questions (McGough et al. 1978; Sheppard et al. 1977) shows that:

- Minorities make up a high portion of the enrollment of low paying service occupations, such as barbering, cosmetology, practical nursing, and so forth; minorities also make up a very low portion in the more lucrative areas, such as electronics, data processing, accounting, and so forth.

- Minorities are enrolled mostly in programs of de facto segregated school systems of larger cities, where the funding levels are far from adequate.

- Minorities represent a very small segment of the administrative and teaching corps of vocational education.

- Minorities have a tendency to perceive vocational education as a dumping ground for students who are classified as "academic misfits."

- If minorities are not employed in the field for which they are trained, most are likely to find jobs at the unskilled or semiskilled level, which they probably could have obtained without vocational education.

- Minorities are conspicuously missing from key leadership and supervisory roles at all levels in vocational and technical education.

- Minorities, in comparison to white graduates from vocational education programs, find themselves on the "short end" with respect to (a) full-time employment and (b) college and/or post-secondary attendance.

In addition, an examination of the matrices shows a number of areas where there has been little or no work done with respect to racial/ethnic minority groups, equity, and vocational education. Only one document was retrieved in each of the four areas that follow: materials assessment, placement, followup and followthrough, and business, industry, labor, and employment. No documents were retrieved that dealt with the six topic areas of recruitment and retention, interpersonal skills, youth groups, community relations, legislation, and funding.

Recommendations for Research and Development

Students and Significant Others

For many minorities, the term "vocational education" must be redefined, since it has been thoroughly documented that racial
and minority groups have been reluctant to enter vocational programs, which have traditionally resulted in low paying, menial jobs (Walker and Fulton, 1981). Successful vocational education students who are members of minority groups should be interviewed to determine routes, barriers, and successes of minority groups.

Minority students must be made aware of the full range of options available to them, including the more technical and highly sophisticated occupational areas. Such occupational awareness can be enhanced through increased minority participation in youth leadership organizations. A brochure or brief informative publication detailing opportunities in highly sophisticated and technical areas, and geared to students and significant others, could be developed. This publication should show minority groups in these new occupational roles.

### Teachers, Counselors, and Teacher/Counselor Educators

Those who train must have knowledge and understanding of the minority culture. This should include (but not be limited to) its background, historical influences, and the trace effects of culture on present day minorities. A number of useful prototypes have been developed in the social sciences (i.e., black and hispanic studies) and should be adapted for inclusion in vocational education teacher and counselor preservice and inservice training courses.

There must be an intensive programmatic effort to bring dignity, respectability, and acceptability to skilled labor. Further investigation of those transferable, management, and basic skills associated with entry-level jobs should provide information that will be useful in this programmatic effort.

### Local Administrators, State Department Personnel, and Federal Personnel

Effective liaisons must be established by the Office for Civil Rights involving federal, state, and local agencies in order to effectuate Title VI of the Civil Rights Act of 1964 and other legal mandates, including Section II-B of the Office for Civil Rights, Vocational Education Guidelines. Prototype workshop materials that focus on linkages between these agencies could be developed.

### Professional Personnel and Advocacy Groups

Since it is evident that the United States is moving away from an industrial base and toward an information base (Streiner 1981), vocational education should work in partnership with
business, industry, labor, and other employment sectors toward bringing racial/ethnic minority populations into high-technology occupations that are without stereotypes and full of promise for professional advancement and monetary gain. This means that access routes to training must be improved.

The federal government, private foundations, and other agencies should fund the production of educational software that focus on the positive benefits of vocational education. Such educational materials should be disseminated in minority communities through schools, churches, and other institutional entities.

References


SEX EQUITY SUMMARY

Rodney K. Spain

Improving our nation's economy in today's inflationary market is a prime concern of legislators and their constituents. In 1980 came promises of less government spending and tighter fiscal control. Since then, a large variety of services to the public, traditionally provided through the federal government, have been either cut back significantly or eliminated altogether. The reallocation of CETA funding alone has reduced payments for city maintenance workers, supplies for the Job Corps program, and services for public job-placement centers. Although the "Battle of the Budget" continues to wage between the executive and legislative branches of the federal government, recipients can expect less federal money to be appropriated for education, and proportionately less than that for educational research and development.

With fewer dollars from which to work, educational researchers must be even more careful to select topics of study and populations in the field that will have the greatest impact for the implementation of a sex-fair vocational education. The research should cover factors that most encourage sex equity and those that most inhibit a sex-fair education. Statistical reports on the economic necessity for most women entering the labor force foster acceptance among employers of nontraditional employees. Workshop materials designed to aid vocational instructors to understand the reasons men choose nontraditional careers can help to break down stereotypes and to overcome biases.

Research, also, should address vocational educators who reach the most people and have the most power to bring about change. Vocational instructors training large groups of students each day influence change more directly than administrators who work peripherally with them. On the other hand, administrators who are sensitized to sex fairness have the power to establish and maintain policies enhancing sex equity. Their influence can break down sex-biased barriers placed by instructors, counselors, and supportive staff, leading to equally significant change.

Examination of the matrices identifies populations and topics of discussion already covered in the vocational education literature. All groups and areas are significant to achieving sex equity in vocational education; however, some have been dealt with more than others. Most of the resources have been written for teachers, with only a moderate amount written for students, counselors, local administrators, state department staff, professional personnel, and research and development staff. Few documents have been published for employers, advocacy groups,
federal personnel, and parents. Topics emphasized have included attitudes and awareness, as well as barriers to sex equity. A smaller number of documents have covered recruitment and placement; planning and policy; business, industry, and labor; legislation; and displaced homemakers. Little information has been published about basic skills, interpersonal skills, student assessment, or youth groups.

Other populations and new topics not found on the matrices are also important to consider when deciding on future areas of sex equity research. For example, labor unions and volunteer groups have not been addressed much in the past. New areas of concern in today's business and educational world are productivity, emerging technologies, and reindustrialization. Little information exists on day-care services, men in nontraditional fields, or male sex-role biases in general.

Cumulatively, therefore, our task is to decide what direction sex equity research and development should take in this era of dwindling federal resources. By addressing vocational educators who are influential and visible, by investigating factors that promote or deter sex equity, and by examining what has been done in the past and what is predicted for the future, recommendations for achieving sex equity through research and development can effectively be prepared.

**Recommendations for Research and Development**

**Employers and Labor Union Personnel**

*Reindustrialization.* During World War II, nontraditional workers aided our nation by working at factory jobs left behind by soldiers. Today, similarly equitable opportunities in the labor market could aid our country's reindustrialization program. Through interviews with various economists, business leaders, and government officials, a plan of action could be developed for alleviating some of our nation's economic problems through sex equity.

*Nontraditional Benefits.* Business, industry, and labor leaders, who have a great deal of influence on educational training, need to become more aware of the benefits of hiring (and, therefore, training) nontraditional employees. Those benefits should be researched and developed through interviews with professionals from the field and nontraditionals in the labor market.

**Advocacy Groups**

Advocacy groups are becoming more and more important in bringing about political and social change in our current
political climate. These groups are already committed to achieving sex equity but may not be aware of the significance of sex equity in vocational education. Awareness products should be developed for members of advocacy groups so they can speak more directly to the issues associated with vocational equity.

Teacher Educators

Teacher educators mold the professional work habits of our future vocational teachers, who in turn, significantly affect equity in the schools. Teacher educators need research products designed to alert them to the problems created by sex discrimination and to instruct them on how to sensitize their students to the problem.

Significant Others

Parents have the most influence on their children's sex- and work-related attitudes and aspirations, yet few materials have been developed to inform parents about sex equity or to sensitize them to the benefits that a sex-fair education offers their children. A study of the myths and questions parents have about nontraditional vocational education should be conducted in order to develop products to inform and sensitize parents to the issues.

State Department Personnel

Assuming sex equity coordinators remain as part of the equity effort in each state, a wide variety of materials is needed to assist them with their work. Sex equity coordinators need information on the most effective methods of bringing about change, their major day-in, day-out responsibility. Through a comparative study of change agent functions and state coordinator duties, resulting instructional materials could enhance the effectiveness of the coordinators' work.

Students

Many students still seek a "Cinderella-Prince Charming" future where men strive in the labor force and women care for the children and home. In reality, few relationships like this exist, and even fewer are likely to develop in our future of high inflation and unemployment. Research should be conducted to see what myths vocational students have about adult life and the labor force, and products should be developed to help dispel those myths.
Counselors

Sensitizing Men. Men receive benefits from women's equity, yet few men are aware of them. For example, when wives enter nontraditional fields of their interest, they usually receive higher salaries. Consequently, their husbands are relieved of the pressure of providing the total financial income for the family. Benefits of women's equity for men should be researched and reported to the field.

Support Groups. Nontraditional students face similar problems when entering careers filled by the other sex. Research on these problems would provide products for developing support groups for the nontraditional students.

Teachers

Materials on male sex-role stereotyping need to be developed for teachers, counselors, and employers. The problems of women and girls entering nontraditional careers are sometimes quite different from those faced by men and boys.
HANDICAPPED EQUITY SUMMARY

Patricia Worthy Winkfield

A total of 615 documents were identified and classified as relating to handicapped populations, equity, and vocational education. Although the handicapped category was more extensively represented in the equity literature reviewed than either sex or racial/ethnic categories, the materials were not evenly distributed across topic areas or for target audiences.

The majority of the documents identified were in the areas of attitudes/awareness (67), student assessment (44), planning/policy (123), and skills training (116). These four areas represented a total of 350 of the 615 documents identified through the literature search.

It is interesting to note that more than 90 percent (a total of 571) of the 615 documents identified were targeted to five audiences:

- students (92)
- teachers (210)
- local administrators (80)
- professional personnel (120)
- research and development personnel (69)

Three target audiences—significant others, labor union personnel, and volunteers—were not addressed at all in the literature. Additionally, only one document was identified for employers, federal personnel, or advocacy groups.

The following recommendations for research and development were written after identifying the topic areas with little or no materials found in the literature, and after considering the relevance of the topic areas for the target audiences.

Recommendations for Research and Development

Students

Students with disabilities or handicapping conditions can benefit from greater research and the development of more vocationally oriented materials in the following areas:

- attitudes/awareness
- recruitment/retention
- interpersonal skills
- youth groups
These four areas are important to the vocational development and adjustment of all students, and especially of students with disabilities. Quality materials developed in these areas could be directed to the students and used by them with or without assistance from a teacher or counselor. Materials of this type can help the students to develop the leadership capabilities, level of involvement, and personal outlook necessary for occupational success.

Significant Others

Research is needed to (a) investigate the influence of significant others on the vocational development of handicapped students, and (b) develop the materials necessary to prepare significant others to utilize their significance in a manner most beneficial to the occupational success of handicapped students.

Handicapped individuals must often rely more heavily than other persons on friends and family members for personal and financial support. Thus, very strong bonds can be created between handicapped individuals and those concerned for and contributing to their welfare. Significant others comprise an important population and cannot be ignored, because they have the ability to affect the occupational choice and vocational preparation of handicapped students. It is necessary for those persons serving the role of significant others in the lives of handicapped students to become aware of vocational and employment opportunities available to the students and barriers that may hinder progress.

Because significant others are keenly aware of the individual needs of handicapped students, they can be instrumental in recruiting them for vocational programs and facilitating their appropriate placement in school and on the job. Such individuals, who perform vital roles as members of a support team for handicapped students, also include school staff, employers, and diagnostic or medical personnel. Significant others, along with team members, can identify appropriate support services to meet the assessed needs of the students and develop individualized education plans.

Professional Personnel

Although research directed toward professional personnel (such as teachers, administrators, and counselors) is more widely dispersed across topic areas than for any other target audience, additional research is needed in several areas of importance. The areas of student and materials assessment, program evaluation, follow-up/follow-through, and dissemination are most relevant to this target population, but are not represented in
the literature. Professional personnel, with their varied spheres of responsibilities, can be most effective in promoting quality assessment of handicapped vocational students, program evaluation, and subsequent followup and followthrough to determine the success of vocational programs.

**Teachers and Counselors.** Additional research and developmental materials are needed to enable school staff to work with handicapped vocational students in the areas of occupational awareness and decision making. Although school staff—primarily counselors and teachers—are active participants in the assessment, placement, program development, and evaluation of handicapped vocational students, materials were not identified to aid them in these aspects of their responsibilities.

**Local Administrators.** Research is essential to determine the extent of linkages that can be developed between the business/industry community and the educational community, in order to facilitate funding for vocational training of handicapped students and their subsequent job placement.

**Employers**

Research must be initiated to identify ways in which employers can aid educators to prepare handicapped students for existing occupations that are in need of workers and new technological occupations. Employers can be instrumental in identifying skills required, and estimating or suggesting modifications that can reasonably be made in the work environment to accommodate workers with various disabilities.

**State Personnel and Federal Personnel**

Vocational education for handicapped populations could be advanced by the development of more materials to be used by state department personnel to deliver inservice training to local practitioners. Materials directed to state personnel are also needed in the planning/policy area. Although state personnel do play a vital role in establishing policies that are implemented locally, they also serve as resources and guides for teachers, counselors, and administrators in their work with handicapped vocational students.

Federal personnel are the primary actors in establishing policies and legislative mandates that determine funding levels and program directions. It is most important that federal personnel be informed of all aspects concerning the vocational education of handicapped individuals in order to aid them in making the best policy recommendations.
Teacher Educators and Counselor Educators

Extensive research efforts should be directed toward the areas of teacher and counselor education in order to enable teacher education personnel to prepare future educators to teach and counsel handicapped students. Federal legislation governing placement of handicapped students in the least restrictive environment makes it necessary for teacher educators to train future vocational educators to be aware of the needs of handicapped students, to adapt or modify curricula and/or equipment to meet their vocational needs, and to serve as members of a team of professionals who plan for the vocational development of handicapped students.

Counselors must be aware of the special needs that handicapped vocational students may have, and must be able to properly assess students and place them in the most appropriate vocational education environment.

Research and Development Personnel

Research and development personnel should become more involved in studies to evaluate training programs, assess student needs and curriculum materials, and assess follow-up/follow-through efforts for handicapped students.

Increased research in these areas would lend information necessary for policy formulation, funding allocations, and program innovations to advance vocational education for handicapped individuals.

Advocacy Groups

The absence of research related to advocacy groups is a serious omission, as strong lobbyists are necessary to promote the vocational education of handicapped populations. Materials must be developed to inform potential advocates about the present status of vocational education for handicapped individuals, barriers that must be overcome, and the influence that advocates can have to increase funding, develop quality training facilities, modify and adapt facilities and equipment, and create greater employment opportunities. Advocacy groups have already been effective in promoting equal treatment of handicapped individuals, as evidenced by legislative mandates governing classroom placement and the development of individualized education plans for handicapped students. To ensure the continued support of advocacy groups, efforts must be made to keep them adequately informed.

Additional areas of concern in the vocational education of handicapped students include the support team approach to
vocational development of handicapped students, and the identification of least restrictive environments for the vocational training of handicapped students. However, these areas were not reflected as first-order concerns in the materials identified by the literature search.

Three documents were found that dealt with the topic of least restrictive environments as a secondary issue. Although this topic did not appear in the literature as a primary subject, it is possible that documents focused on mainstreaming also discussed least restrictive environments.

Handicapped individuals have traditionally been trained for and employed in service-oriented occupations that yield low status and low pay. Investigation should begin to determine how handicapped individuals can be trained for new technologies and thus assume jobs in emerging occupations. The new technological occupations must be identified, along with their adaptations/modifications in training and the work place that are necessary to accommodate persons with handicaps.

Stereotypic depictions of handicapped individuals portray them as very productive in service occupations—conscientious and hard-working. If these attributes contribute to the success and ready hiring of handicapped persons in service occupations, the same attributes should contribute to their success and productivity when they are employed in a wider range of new vocations.
EQUITY SUMMARY

Louise Vetter

This initial synthesis of the materials identified through searches of the ERIC database and the Vocational Education Program Improvement Data Base, provides a quantitative picture of equity in vocational education. Documents identified through the database searches were classified by topics covered and target populations intended and arranged in a pair of two-dimensional matrices. Because of time and cost constraints, no attempt was made to determine the quality of the materials. Also, the synthesis was limited to materials relating to the three special populations specified by the OCR Guidelines: persons discriminated against on the basis of racial/ethnic identity, sex, or handicap.

Only 5 percent of the 1,357 items included in this study dealt with more than one of the three special population groups. This observation probably reflects the funding patterns within vocational education. It may also be a reflection of a situation where the persons who propose and implement projects and programs are basically only concerned about equity as it relates to one particular group. However, in this era of cutbacks in funding in vocational education, we may need to be more concerned about how to implement programs and projects that take into consideration the needs of a range of these special population groups.

Another observation from the items included in this study is that of vocational education's negligence in dealing with the special population of racial/ethnic minority groups. Again, this may reflect funding patterns within vocational education, as these groups may not have had the benefit of funding priorities specified for programs and projects to the same extent that the other groups have. But if the number of existing vocational education materials may be used as a yardstick, vocational education needs to pay considerably more attention to equity for racial/ethnic minority groups.

In general, it appears as though materials in equity are targeted to most relevant school personnel on topics that relate directly and almost exclusively to education. The one exception, in terms of target audience, is teacher/counselor educators, for whom very few items were identified.

Although materials for school personnel seem plentiful, few equity materials appear to exist for people outside the educational system. That is, very few items for employers, advocacy groups, and significant others (parents, spouses, peers) were identified. Other potential target populations, such as labor
union personnel, volunteers, advisory committee members, and school board members, were not represented at all in the items that were reviewed.

In addition, the materials identified seldom dealt with topics, such as employability/survival skills, job placement, followup/followthrough, and community relations, that require at least the partial involvement of people outside the educational system. Other emerging topics, such as productivity, reindustrialization, high technology, and the economic costs of equity, were not represented at all in the materials reviewed.

Since school systems operate within the larger community and since the goal of vocational education is to prepare students for successful employment, it seems reasonable that efforts should be made to expand the scope of equity programming and projects to include the wider community. The preparation of materials targeted for people other than school personnel, and on topics related to the wider community, would be a step in that direction.

**Recommendations for Research, Development, and Leadership Development**

- Concentrate on the possibilities of providing programming that incorporates more than one of the special needs groups.

- Focus more attention on the needs of racial/ethnic minority groups.

- Focus more attention on target populations beyond the education professionals, such as "significant others," employers, and advocacy groups.

- Within the education profession, focus more attention on the target population of teacher/counselor educators.

- Provide more assistance in the areas relating to employment, such as employability/survival skills, interpersonal skills, placement, followup/followthrough, and community relations.

- Focus attention on equity's relationship to the emerging broad concerns of the country at this time, such as productivity, reindustrialization, and high technology.
PRIORITIZED RECOMMENDATIONS FOR THE FUTURE

A technical panel of six people reviewed the preceding material. Using a modification of the Nominal Group Technique, they developed a listing of thirty-five goals for equity in vocational education. These thirty-five goals were then rated to determine which goals should be of highest priority to vocational education equity.

Technical Panel

Members of the Technical Panel were:

Nancy Evans, State Supervisor, Sex Equity, Ohio

Barbara Kemp, Supervisor, Special Needs Populations, Office of Vocational and Adult Education, U.S. Department of Education (retired)

Beverly Postlewaite, Special Assistant to State Director, Commission for Vocational Education, Washington

Samuel Proctor, Martin Luther King Professor, Rutgers University

Gary Ridout, Office of Civil Rights Coordinator, State Division of Vocational Education, North Carolina

Alan Sheppard, Department of Vocational Education, Graduate Division, Virginia Polytechnic Institute and State University

Equity Goals

After the technical panel developed the listing of thirty-five goals for equity in vocational education, they rated the goals in terms of importance. The rating scale ranged from 5 (most important) to 1 (least important). The goals are listed below, in order of priority, with the average rating given in parentheses following the goal.

- Synthesize and disseminate currently available information and materials. (5.00)
- Describe and share effective ways to communicate with employers to encourage the hiring of men and women, minorities, and handicapped people in nontraditional jobs. (4.83)
- Employ greater numbers of minorities, women, disadvantaged and handicapped persons in key leadership
and supervisory roles in vocational education, especially at state and federal levels. (4.83)

- Infuse equity into all areas of the vocational education delivery system. (4.67)
- Create in vocational education personnel a greater sensitivity and understanding of equity concerns, including preservice and inservice education. (4.67)
- Provide greater access for women, minorities, the disadvantaged, and handicapped to quality vocational education programs. (4.67)
- Research how state and local administrators perceive the problems of equity. (4.67)
- Modify lengthy research and development (R&D) reports into short, to-the-point, easy-to-follow publications for specific target audiences. (4.67)
- Develop more support systems for students in nontraditional programs to get nontraditional jobs. (4.50)
- Provide more attention to the needs of adults; for example, refugees, incarcerated persons, illiterates, and older people. (4.33)
- Utilize state evaluation procedures (e.g., civil rights reviews and program evaluations) to document equity changes and needs. (4.33).
- Develop and disseminate materials for target populations to enable them to enter and succeed in more highly skilled areas (high technology). (4.17)
- Expand students' perceptions and options in work roles, family roles, and personal development. (4.17)
- Target vocational education funds to inner cities with a high density of minority/disadvantaged youth. (4.17)
- Understand and seek support from advocacy groups. (4.00)
- Provide for more collaboration between prevocational and vocational education for better basic preparation and clearer career expectations. (4.00)
- Provide intensive programmatic efforts to bring about greater respectability and acceptability of skilled labor to vocational education students. (4.00)
- Research the efficacy of R&D to bring about changes. (4.00)
- Coordinate with other educators dealing with the same population groups. (3.38)
- Research trends (i.e., Where should we be in equity in 1990?). (3.83)
- Provide greater integration of equity perspectives for development efforts. (3.83)
- Investigate research on changes in family life resulting from women entering the paid labor force. (3.83)
- Provide greater integration of equity perspectives for data collection. (3.67)
- Include all equity concerns (i.e., access and opportunity) as a single unit. (3.67)
- Research the personal benefits of sex equity for men. (3.33)
- Study the attitudes of minority youth toward the "culture of success" and their chances (e.g., Is there a sense of futility?). (3.33)
- Research trends in formal policies and procedures regarding equity in schools. (3.17)
- Describe ways that vocational education can keep disadvantaged and minority youth from dropping out of school. (3.00)
- Investigate research on changes in family life resulting from men entering the household work force. (3.00)
- Provide mechanisms and support strategies that enhance the chances of job success of handicapped persons. (2.67)
- Study salary differences in comparable jobs by sex, racial/ethnic group, and handicap. (2.50)
- Research demographic differences on issues of equity. (2.50)
- Identify the factors that cause local education agencies to see equity as a priority issue. (2.33)
- Investigate the opportunities of military recruits for vocational education. (2.33)
- Research the characteristics of the people who make policy for vocational education (e.g., socioeconomic status, age, race, sex, educational background). (1.67)
The following seven bibliographies represent the materials identified through the searches of the ERIC database and the Vocational Education Program Improvement Data Base, and from Resources and References. The bibliographies are organized to make it easy to locate the items shown graphically on the matrices on pages 4-8. Each bibliography is organized by topic, with the target populations used as subheadings. Items from the Vocational Education Program Improvement Data Base are asterisked (*). Items from the Far West Laboratory for Educational Research and Development annotated bibliography, Resources and References for Sex-Fair Vocational Education, compiled by Shirley Wong in August 1981, are double-asterisked (**). It is hoped that the use of this format will make it easier for readers to identify specific references that they are interested in locating.
APPENDIX A

RACIAL/ETHNIC MINORITY EQUITY

Access

Professional Personnel

R&D Personnel


Barriers

Teachers

Professional Personnel


Attitudes/Awareness

Student

*Vocational Education Program Improvement Data Base

A-1

43
Teachers


Counselors


Professional Personnel


Student Assessment

Students


Basic Skills

Students


Platt, Gail M. Bilingual Education for Occupational Research and Evaluation (Before). Levelland, TX: South Plains College, forthcoming.*


*VEPIDB

Van Matre, Wesley, Jr. Vocational Oriented Remedial Reading Program for Limited English-Speaking Students. Pharr, TX: Pharr-San Juan-Alamo Public Schools, forthcoming.* Project description.


State Department Personnel


R&D Personnel


Materials Assessment

Teachers

Evaluation

Teachers

Counselors

Local Administrators
R&D Personnel
Eggland, Steven A. and Johnson, Carol A. Minority Groups in Nebraska Vocational Education Programs. Lincoln, NE: Center for Business and Vocational Teacher Education, University of Nebraska, forthcoming.* Project description.

Students


Levering, Nelson. Indian Vocational Education Training Program. Macy, NE: Omaha Tribe of Nebraska, Vocational Education Department, forthcoming.* Project description.


*VEPID8


Teachers


Northern New Mexico Community College, Bilingual Skills Training Program. El Rito, NM: Northern New Mexico Community College, forthcoming.* Project description.


*VEPIDB
R&D Personnel

Support Services

Students

Harmanison, John. Urban Educational Center Associate Degree Project. Providence, RI: Rhode Island College, Urban Education Center, forthcoming.* Project description.

Teachers


Placement


Followup/Followthrough

R&D Personnel

Dissemination

Teachers

Pierson, Michael J. Development, Collection, and Dissemination of Cost-Effective Bilingual Vocational Instructional Materials. San Marcos, TX: Southwest Texas State University, forthcoming.* Project description.

*VEP108
Business/Industry/Labor Employment

Professional Personnel


Desegregation

Local Administrators.


Professional Personnel


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APPENDIX B

SEX EQUITY

Access

**Students**


**Teachers**


Iowa State Department of Public Instruction. *Guide to Implementing Multicultural, Non-Sexist Curriculum Programs in Iowa Schools.* Des Moines, IA: Iowa State Department of Public Instruction, Educational Equity Section, 1976. Guide.**


**Counselors**


**Vocational Education Program Improvement Data Base

**Resources and References


Local Administrators


Teacher Educators


Professional Personnel


**Resources and References

**Barriers**

Students


Teachers


Brenholt, Jo Ann M. A Study to Determine Achievement of Sex Equity in Secondary Business Education Programs as Perceived by Business Education Teachers in Montana. Helena, MT: Office of Public Instruction, 1980. Statistical data.**


Holder, Birdie. Program Packet for the Involvement of Students in Positive Solutions to Pressures and Problems Related to Prejudices and Sex Role Stereotyping. Lincoln, NE: University of Nebraska/Lincoln, Center for Business and Vocational Teacher Education, 1980.**


*VEP/DDB
**Resources and References


Yosha, Patricia. *In-Service Training Film and Workshop on Sex Equity in Vocational Education.* Hartford, CT: West Hartford Public Schools, forthcoming. Guide.

Counselors


Local Administrators

Davis, Hazel C. *Analysis of Sex-Role Stereotyping and Sex Bias in Secondary Vocational Education in Kentucky.* Bowling Green, KY: Western Kentucky University, forthcoming. Guide.

Najita, Joyce M. *Preparing a Viable Plan of Action to Overcome Covert and Overt Sex Bias, Stereotyping, and Discrimination in Postsecondary Vocational Education Programs.* Honolulu, HI: Industrial Relations Center, University of Hawaii, forthcoming. Report.


State Department Personnel

*VEPIDB
**Resources and References

B-6

57


Professional Personnel


*VEPIDB
**Resources and References

58


Schenck, John Phillip. Sex Fairness in Vocational Education. Information Series No. 120. Columbus, OH: Ohio State University, ERIC Clearinghouse on Career Education, 1977. (ED 149 189) Bibliography.


**Resources and References

B-8 59


R&D Personnel


**Resources and References


Advocacy Groups

Attitudes/Awareness

Students

**Resources and References


Cathie, Shirley B. *Select . . . from All Your Options.* Student Guide to Vocational Education. Glassboro, NJ: Educational Improvement Center, 1979. (ED 183 923) Instructional material.


Significant Others


*VEPIDB

**Resources and References

B-11


Teachers


**Resources and References**


*VEPIDB*

**Resources and References**


**Resources and References

B-14

65


Vermont Vocational Sex Equity Coordinator. Sex Equity Information Packet. Montpelier, VT: State Department of Education. Collection.**


**Resources and References
Counselors


Local Administrators


State Department Personnel


Good, James D. Untapped Resources in Vocational Education: Trainer/Teacher Guide. Columbia, MO: Instructional Materials Laboratory-MO, 1979.**


*EPIDB
**Resources and References


Teacher/Counselor Educators


Professional Personnel


Bohn, Ralph C. "Will the Last Bastion Fall?" American Vocational Journal 51(1976): 70-72. Journal article.

**Resources and References


Resources and References

**Resources and References**


R&D Personnel


**Resources and References


Advocacy Groups

**Resources and References**

Student Assessment

Teachers


Teacher/Counselor Educators


Professional Personnel


R&D Personnel

Dietrich, Marie C. and Doran, Rodney L. "Work Values Contrasts at the Associate and Baccalaureate Student Levels in the Medical Laboratory Sciences." Evaluation and the Health Professions 1(1978): 217-227. Journal article.


Recruitment

Teachers


* VEP108
** Resources and References


Hay, Donald L. How to... Strategies for Sex Equity. Morehead, KY: Morehead State University, forthcoming. Guide.*


Counselors


*VEP108
**Resources and References

B-23 74

Miller, Susan W. Achieving Sex Equity in Community Colleges: An Inservice Training Module on Recruiting and Retaining Students in Courses that are Nontraditional for One Sex. Los Angeles, CA: Los Angeles Community College District, Division of Educational Services, 1980. Guide.


Local Administrators


Professional Personnel

*YEPIDB

**Resources and References


R&D Personnel


**Resources and References

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B-25

Basic Skills

Teachers

Employability/Survival Skills

Students


Teachers

Interpersonal Skills

Students

Significant Others

Teachers

*VPIIDB
**Resources and References

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B-26
Counselors

Planning/Policy

Teachers


Counselors


Local Administrators


Hinley, Hugh.  Development of a Model to Identify Vocational Education Needs Associated with Sex-Role Stereotype within Special Target Groups.  Tallahassee, FL: Florida State University, forthcoming.  Guide.


State Department Personnel


*VEP108
**Resources and References

Professional Personnel

R&D Personnel


Material Assessment

Students

Teachers


* VEP106
** Resources and References
Iowa State Department of Public Instruction. Multicultural, Nonsexist Education In Iowa Schools. Des Moines, IA: Iowa State Department of Public Instruction, 1979-81. Guide.


State Department Personnel


R&D Personnel


*VEP108
**Resources and References

B-30
Program Evaluation

Teachers


Local Administrators


State Department Personnel


*VPIIDB

**Resources and References
### Teacher/Counselor Educators


### R&D Personnel


### Advocacy Groups


### Skill Training Programs

**Students**


**Teachers**


*YEP108

**Resources and References**


Page, Roy. Vocational Instructional Services In Agricultural Education. College Station, TX: Texas A and M University, forthcoming. Guide.


University of New Mexico. A Manual of Strategies for Educational Equity for the Administrators, Faculty, Staff and Students of Our Public Schools. Albuquerque, NM: University of New Mexico, Vocational Education Equity Center (VEEC), 1980. Guide.


Teacher/Counselor Educators


Professional Personnel

Youth Groups

Teachers


Professional Personnel

R&D Personnel


Support Services

Students


Teachers


*VEPIDB
**Resources and References
Counselors


Professional Personnel


R&D Personnel


Placement

Students


**Resources and References
Teachers

Counselors

Professional Personnel

Dissemination

Significant Others

Local Administrators


Professional Personnel

Business/Industry/Labor

Students


**VEPIDB
**Resources and References

Teachers


Hawaii Office of the State Director of Vocational Education. EGO (Equal Goals in Occupations) Student Mini-Session. Honolulu, HI: Office of the State Director of Vocational Education, 1979. Guide.**


Counselors


**References and References

**VPEIDB

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B-37


Wisconsin Board of Vocational-Technical and Adult Education. Pioneers In Vocational Education. Madison, WI: Department of Public Instruction, 1980. Collection.

Local Administrators

Employers


Professional Personnel


**Resources and References

B-38


R&D Personnel


Community Relations


Legislation

Students


Webber, Loydia. Promoting Sex Equity in Vocational Education Modules. Raleigh, NC: Department of Public Instruction, 1980.*

*Resources and References

B-39 90
**Teachers**


**Local Administrators**


**State Department Personnel**


**Resources and References**
Federal Personnel


Professional Personnel


R&D Personnel


Mazzarella, Jo Ann. Implementing Title IX. ACSA School Management Digest, Series 1, Number 8. ERIC/CERM Research Analysis Series, Number 35. Eugene, OR: Oregon University, 1977. (ED 146 663) Bibliography.


Advocacy Groups


Funding

Local Administrators

State Department Personnel


R&D Personnel

Displaced Homemakers

Students

**Resources and References

B-42


*Teachers*


*Counselors*


Local Administrators


*VEP1DB
**Resources and References

State Department Personnel


R&D Personnel
APPENDIX C

DISABLED/HANDICAPPED

Access

Students


Teachers


Local Administrators

Fair, George W. Vocational Education Programming for Special Education Students in Texas During 1980. Richardson, TX: University of Texas at Dallas, forthcoming. Project description.


State Department Personnel


R&D Personnel


*Vocational Education Program Improvement Data Base
Barriers

Teachers


Counselors

Local Administrators
Clark, Donald L. Study to Develop Techniques and Procedures to Enable the Handicapped Student to Succeed in Community College Vocational Education Programs. College Station, TX: Texas A and M University, forthcoming. Project description.


Professional Personnel


*VEPIDB

R&D Personnel

Jernigan, Joan Shirley and Clark, Donald L. Assisting Handicapped Students In Vocational Technical Programs In Community Colleges. Identification of Barriers; Recommendations for Removal of Barriers; Tasks to be Implemented. Summary report. College Station, TX: Texas A and M University, College of Education, 1978. Research report.

Attitudes/Awareness

Students


Teachers


*VEPIDB


Counselors


Local Administrators


Professional Personnel


R&D Personnel


Hoover, Bette L. Survey of Vocational School Teachers' Attitudes Toward Hearing Impaired Students and Their Knowledge of Special Education Needs of These Students. Bloomsburg, PA: Bloomsburg State College, forthcoming.* Project description.


**Student Assessment**

**Students**


Nelson, Delores H. and Murphy, Edward B. *Vocational Assessment Center for the Handicapped.* Lexington, KY: Fayette County Public Schools, forthcoming.* Project description.


*VPIIDB


Teachers


Counselors


Local Administrators


Professional Personnel


R&D Personnel

Recruitment/Retention

Students
Goodnow, Don. Employee School Program (ESP) for Adults. Iowa City, IA: Kirkwood Community College, forthcoming. Project description.

Teachers

VEP108
Basic Skills

Students


Teachers


R&D Personnel

Employability/Survival Skills

Students


*VEPIDB


Nelms, Harry M. "The Development and Implementation of a Model to Ensure that Vocational Education Students are Functionally Competent." Los Angeles, CA: Central City Occupational Center, 1979. (ED 189 275) Project description.


R&D Personnel


Student


Teachers


Professional Personnel


Planning/Policy

Teachers


*VEP1DB


Smith, Sarah Elizabeth. To improve the Probability of Success (TIPS) (continuation). Herrin, IL: Herrin Community Unit 4, forthcoming.* Project description.


Thompson, Jeanne A. So You Have a Hearing Impaired Student in Your Vocational Education Classroom (A Prototypic Resource Unit). Kent, OH: Kent State University, College of Education, 1981. (ED 200 808) Teaching guide.


*VEPIDB C-16

112


Classroom material.


Counselors


Local Administrators


*VEP108


*VEPIDB


State Department Personnel

*VEPID8 C-20 116


Federal Personnel


Teacher/Counselor Educators


*VEP1DB


Professional Personnel


Sarkees, Michelle D. The Role of Vocational Education in the Occupational Preparation of Handicapped Learners. Athens, GA: Georgia University, Division of Vocational Education, 1979. (ED 204 977) Non-classroom material.


R&D Personnel


Zenk, George F., Jr. Study to Determine the Feasibility of Pre- Vocational Programming for Severely Handicapped Students in the Public Schools in Rural North Dakota. Grand Forks, ND: University of North Dakota, forthcoming. Project description.

Advocacy Groups

Materials Assessment
Teachers

Program Evaluation
Teachers

Local Administrators


*VEP1DB


State Department Personnel


Teacher/Counselor Educators


Professional Personnel


*VEPIDB


R&D Personnel


Russo, Rocco P. *Toward Understanding and Evaluating Special Needs Programs.* Minneapolis, MN: Minnesota University, Department of Vocational and Technical Education, 1980. (ED 198 287) Non-classroom material.


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**Skill Training Programs**

**Students**


Corwin, John G. *Special Vocational Training for Secondary-Level Educable Mentally Handicapped and Learning Disabled Students through Utilization of Area Vocational Education Centers in Region Seven.* Covington, KY: Vocational Education Region 7, forthcoming.* Project description.


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*VEP 1DB*


Kozlak, Stanley M. Hampshire Vocational Skills Training Program. Ware, MA: Ware Public Schools, forthcoming. Project description.


Malo, Stephen F. *Food Services Programs for Special Education and Vocational Education*. Wakefield, MA: Wakefield Public School, forthcoming.* Project description.


Mullen, James E. *Carpentry, Building Maintenance, and Custodial Services Instruction within a Special Education Setting (continuation)*. Norwalk, CT: Cooperative Educational Services, forthcoming.* Project description.


*VEPIDB

C-29


Teachers


Bahr, Dennis. Teacher Incentive Grant. Webster, IA: Webster City High School, forthcoming.* Project description.


*VEPIDB C-30 126


Mendola, Chris, et al. JESSE of Marion County: Job Employability Skills for Special Education: "A Tenderfoot-Tryout for Teachers In Secondary EMR." Ocala, FL: Marion County Board of Public Instruction, undated. (ED 115 006) Research report.


Local Administrators

Professional Personnel


*VEP10B
R&D Personnel


Youth Groups

Students


Teachers


Support Services

Students


*VPIIDB

C-35


*YEPIDB
Local Administrators


R&D Personnel


Placement

Students


Teachers


Counselors


Local Administrators


Professional Personnel


Followup/Followthrough

Local Administrators

Thrane, Lucy. Follow-Through and Supportive Services. Columbus, OH: Ohio State University; National Center for Research In Vocational Education, forthcoming. Project description.

*VEP1DB
Professional Personnel

R&D Personnel


Dissemination

Teachers


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*WEBID


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Local Administrators

Professional Personnel


Employers

*VEPIDB
Community Relations

R&D Personnel

Legislation

Local Administrators

State Department Personnel

Teacher/Counselor Educators

Professional Personnel


Funding

Local Administrators


State Department Personnel
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Professional Personnel


R&D Personnel


Mainstreaming

Students

VEPIDB
Teachers


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Local Administrators


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Teacher/Counselor Educators

Professional Personnel


* VEPIDB
R&D Personnel


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Teachers


Teacher/Counselor Educators


Professional Personnel


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Teachers

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**Teachers**


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**Professional Personnel**


*VEPIDB
R&D Personnel


Cooperation/Coordination

Teachers


State Department Personnel


*VEPID8

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Professional Personnel


Articulation


Professional Personnel


Articulation

APPENDIX D

RACE/SEX/HANDICAP EQUITY

Access

Teachers

Professional Personnel


Recruitment/Retention

Counselors

Planning/Policy

Local Administrators


**Resources and References

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Students
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Students
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Business/Industry/Labor/Employment
Professional Personnel
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**Resources and References

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Legislation

Local Administrators

State Department Personnel


Professional Personnel

APPENDIX E

RACE/SEX EQUITY

Access

R&D Personnel


Barriers

Students

Teachers

Local Administrators

Professional Personnel


#Vocational Education Program Improvement Data Base
**Resources and References


*VEPIDB
**Resources and References
Planning/Policy

Professional Personnel


Program Evaluation

Professional Personnel


R&D Personnel


Skill Training Programs

Students


Teachers


Local Administrators


*VEPIDB
Support Services

Students

Placement

Local Administrators

R&D Personnel

Business/Industry/Labor/Employment

R&D Personnel

Legislation

Professional Personnel

**Resources and References
APPENDIX F

RACE/HANDICAP EQUITY

Recruitment/Retention

Teachers


Employability Skills

Teachers


Planning/Policy

Professional Personnel


Skill Training Programs

Students

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Support Services

Teachers

Business/Industry/Labor/Employment

Professional Personnel

Legislation

Professional Personnel

*VEP1098

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APPENDIX G

SEX/HANDICAP EQUITY

Attitudes/Awareness

Students


Counselors


Recruitment/Retention

Teachers


Policy/Planning

Local Administrators


Program Evaluation

R&D Personnel


Skill Training Programs

Students


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Teachers


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Support Services

Teachers


Counselors


Placement

Students


Legislation

Professional Personnel