A study examined 17 papers dealing with the issue of equity in vocational education. Synthesized during the study were ideas set forth in papers written by individuals involved in the academic community, vocational education, and special interest group advocacy. All the papers, to varying degrees, focus on the barriers posed by vocational delivery systems, financial constraints, employment discrimination, and economic problems to the following special needs groups: disadvantaged persons, disabled persons, limited-English proficient individuals, older adults, members of racial and ethnic minority groups, and men and women who experience sex discrimination. Based on the points raised in these papers, the researcher developed a series of recommendations pertaining to the implementation of Title II of the Education Amendments of 1976; improved communication; and shared responsibility, training of vocational educators and administrators, curricula and services, funding alternatives, and research priorities. (MN)
EQUITY AND VOCATIONAL EDUCATION:
GUIDELINES FOR THE 1980s

by

Judith M. Gappa

The National Center for Research in Vocational Education
The Ohio State University
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1981
The National Center for Research in Vocational Education's mission is to increase the ability of diverse agencies, institutions, and organizations to solve educational problems relating to individual career planning, preparation, and progression. The National Center fulfills its mission by:

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JUDITH M. GAPPA, currently Associate Provost for Faculty Affairs and Professor of Women's Studies at San Francisco State University, was formerly director of Affirmative Action/Equal Opportunity Programs at Utah State University. She has also held positions as assistant professor of sociology and social work at Utah State; senior staff associate at the National Center for Higher Education Management Systems, Inc. in Boulder, Colorado; and project director of the "Curriculum Analysis Project in the Social Sciences." She has worked in higher education administration since 1973 after teaching at both the secondary and postsecondary levels. She has served on numerous university committees; is the author of many publications and articles on the role and status of women in academe; and has made presentations at a number of conferences and workshops. In addition, she has directed numerous state and federally sponsored projects and is a member of several educational organizations. She received her B.A. in music and her M.A. in musicology from George Washington University and completed an Ed.D. in educational administration at Utah State University.
Before vocational educators can adequately meet the special needs of special groups, they must be committed to a philosophy of equitable education. The issue of equity in education has received a great deal of attention over the last ten years from the legislative, judicial, and academic sectors. As a result of this attention, research and analysis have shown that the term "equity" has a different connotation for nearly everyone who has attempted to define and apply it to educational programs. In addition, a host of related terms such as equality, disparity, and discrimination are a part of the vocational educator's daily vocabulary.

In an attempt to help vocational educators to articulate a definition of equity, the National Center for Research in Vocational Education has commissioned seventeen papers on equity from three broad perspectives--academic, vocational, and special needs. The authors in each of the three groups provide their own perceptions of and experiences with equity in education to bring vocational educators to a better understanding of this complex but timely issue.

The National Center is indebted to these seventeen authors for their contribution to furthering research on equity in vocational education: Dr. Richard Adams, Dr. Gilbert Cardenas, Dr. Yean H. Choi, Ms. Jo Ann Crandall, Ms. Nancy Carol Eliason.
Ms. Nancy Smith Evans, Ms. Geneva Fletcher, Dr. Marc Hull, Dr. Irving Kovarsky, Dr. Samuel D. Proctor, The Honorable Lisa Richette, Dr. Jerry Salomone, Ms. Carol Schwartz, Dr. Henrietta Schwartz, Dr. Alan N. Sheppard, Dr. Lucille Campbell-Thrane, and Dr. Clyde Welter. We are also indebted to Dr. Judith Gappa, Associate Provost for Faculty Affairs at San Francisco State University for reviewing and synthesizing all seventeen papers. Special thanks also go to Cindy Silvani-Lacey, program associate, for coordinating the papers and to Regenia Castle and Beverly Haynes who spent many hours typing manuscripts.

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

Vocational educators have grappled with equity as a problem and have espoused it as a cause since 1963 when Congress issued both an equity mandate and an equity challenge with the passage of the Vocational Education Act. This paper is one of seventeen reports commissioned by the National Center for Research in Vocational Education to meet the equity challenge through a multidisciplinary approach encompassing three perspectives--academic, vocational education, and special interest group advocacy.

The following paper synthesizes the seventeen multidisciplinary equity papers. The author discusses common themes among the papers first by describing a concept of equity applicable to vocational education and then by examining the current status of equity in vocational education. She concludes with recommendations for the future as well as a brief summary of each paper to assist the readers in selecting those papers most germane to their needs and interests.
INTRODUCTION

This overview synthesizes seventeen papers about equity and vocational education commissioned by the National Center for Research in Vocational Education and written by nationally known specialists in a variety of fields. The papers are written from three major perspectives: selected academic disciplines, vocational education, and special interest group advocacy. The three perspectives provide a unique forum for the expression of subtle differences, colorful embellishments, and occasional conflicts of priority and interest among certain common themes. Those who read all the papers will see these common themes constantly reappear, richly colored by the perspective of a particular author.

The purpose of this overview is to describe the common themes and to show that, for those concerned with the future of equity in vocational education, there is consensus among the experts about many of today's problems and about how to resolve them in the future. Thus the papers provide a framework for taking action to achieve equity during the 1980s. But a caution is needed. The overview can only give a brief glimpse of the magnitude of the ideas contained in the papers. Awareness of the effects of a lack of equal opportunity, insight into the causes for limited achievement of equity goals, and the overall complexity of the many issues, problems, potential strategies, and solutions can only be obtained by reading the papers themselves.
In order for the reader to have a framework from which to delve further, the overview synthesizes the vast amount of information and ideas the papers contain by proceeding from the present to the future. First, a concept of equity applicable to vocational education in the 1980s is described. Second, the current status of equity in vocational education is examined. This section includes demographic data, information about special interest groups, and problems and issues discussed by the authors. A brief description of the progress that has been made in achieving equity concludes this section. Authors tend to acknowledge that some progress has been made, chiefly as a result of legislation. They are more concerned, however, with emphasizing the problems of today and how to solve them tomorrow.

In the third section, recommendations for the future are explored. The overview concludes with a brief summary of each paper to assist readers in selecting the ones most useful to them.

The overview describes and synthesizes the common themes found in the papers, but it does not contain the richness of the individual experiences and opinions so clearly expressed by the authors, who are intimately acquainted with and deeply concerned about their subjects. Again, the overview can never be a substitute for the papers themselves. Instead, as previously mentioned, it is both an introduction to invite the reader to delve further and a returning point for refocusing on common themes.
AN EQUITY CONCEPT

Equity in American society has its roots in the U.S. Constitution and subsequent legislative, regulatory, and judicial actions. Though stated in 1980 by one of the seventeen authors, the following comment could easily have been made by one of the country's founders:

This country cannot benefit in the long run from policies that deliberately deny people the opportunity for continuous growth, development, and the opportunity to perform a service (N. Alan Sheppard).

Our Constitution is based upon concepts of justice, due process, and equal protection of individual rights. The evolution of the meaning of these terms has been accompanied by the evolution of an equity concept. For the purposes of these papers, equity can be simply defined as:

The fair and just treatment of all members of society who wish to participate in and enjoy the benefits of education and employment.

To better understand the meaning of this definition of equity, "fair and just treatment" and "participate in and enjoy the benefits of" need further exploration.

Fair and just treatment encompasses both the humanistic value of an equal opportunity to attain the benefits of education and employment, and the judicial concept of equal protection under the law. As shaped by our cultural and ethical foundations, a humanistic concept of fair and just treatment obliges individuals to examine their actions with regard to others, to ensure that they are impartial and guided by an objective consideration of
they are impartial and guided by an objective consideration of the potential of other individuals. To meet the judicial requirement of equal protection under the law, special compensatory measures for certain groups may be necessary.*

In keeping with the humanistic doctrine, the fact of discrimination was addressed through legislative mandates for equal opportunity and nondiscrimination in the early 1960s. Later, this was characterized by minority group members and others as perpetuating a benign neutrality in which minority groups were no longer openly discriminated against, but in which their status did not noticeably change.** Gradually, the humanistic concept of fair and just treatment began to change from one of benign neutrality to one of action in order to ensure equal rights for all under the equal protection clause of the Constitution. The idea that the achievement of equity requires individual and societal action to achieve results or equitable relief is pervasive among the authors of these papers.

In the words of one author who is a judge:

Implicit in the notion of equity is a doctrine of equality—that citizens are possessed of equal rights which equity will vindicate. . . . The heart of equity is action—individually ordered and fashioned to end the injustice inherent in the plaintiff's situation. Equity implies meaningful intervention beyond rhetoric (Lisa Richette).

Richette's idea of individually-ordered action to correct


**Ibid., p. 7.
inequities is pursued by several other authors. Marc Hull states:

Equity is often a situation-specific concept, that is to say, the determination of what is fair, just, or appropriate may be entirely dependent on the factors and circumstances which comprise a single case. In one situation, equity may be achieved by treating all students equally with respect to the procedures used to achieve certain instructional goals and objectives. In another case, equity may require that a handicapped student be given an amount of assistance which clearly exceeds that which is given to nonhandicapped students in order to achieve certain instructional goals and objectives.

The thesis that "nothing is more unequal than providing equal opportunities to students with unequal abilities" (Gans as quoted in Hull and Salomone) is stated more strongly by Carol Schwartz:

Equity in vocational education requires [underlining mine] that we provide to our disadvantaged youth such additional elements in the educational process that will enable them to take advantage of that process and join the mainstream of the economic life of our country.

The movement from rhetoric to action, from the neutrality of nondiscrimination to affirmative action on behalf of individuals, is an evolution of an equity concept that is generally accepted by the authors of these papers, if not by all of American society.

The idea that equity means action on behalf of those who have not traditionally participated in and benefitted from education and employment is enhanced by a focus upon cultural pluralism. The authors believe it is crucial to preserve the cultural pluralism of our nation while simultaneously meeting individual needs. They feel strongly that vocational education for special needs populations must recognize that each member of the special
needs group is an individual with differing problems and learning patterns. For the cultural pluralists, equity becomes the absence of discrimination and the advocacy of individuals in the assessment of their potential, while simultaneously emphasizing the value of the individual's membership in the group (Thrane, Crandall, C. Schwartz, Hull, and Sheppard).

For example, in applying cultural pluralism to equity in vocational education, Crandall states:

Since language is the most obvious symbol of one's culture, ethnicity, and identity, it is natural for many adults who speak another language to fear loss of that identity or rejection of their own culture when they attempt to speak a second language. . . . Vocational instructors need to allow these culturally diverse students to have opportunities to learn in whatever ways are most appropriate for them. Some learn by doing; others learn by watching; yet both groups may achieve the same degree of skill.

Because the achievement of equity requires action by and on behalf of individuals who simultaneously maintain their cultural identity, "participation" includes access, meaningful participation, and the elimination of barriers in vocational education and employment. Similarly, "benefits" will occur only if there is assessment of the outcomes of the educational process leading to program correction and the proper allocation of resources, so that members of special interest groups are not hindered in meeting individual objectives. Access, participation, and benefits, as integral parts of an equity concept, constitute a large part of the discussion about the current status of equity and recommendations for the future in later sections of this paper.
In basic agreement with the other authors, both Gilbert Cardenas, an economist, and Henrietta Schwartz, an anthropologist, define equity as the fair redistribution of goods, services, and opportunities in American culture. Yet Schwartz warns of the potential for conflict:

The benefits of the society are reaped by the individual who is competitive, aggressive, acquisitive, and independent—people who more than others have "made it." These sometimes conflicting core values of fierce, competitive self-reliance and cooperative, sharing egalitarianism have been referred to by some social scientists as the American dilemma (Myrdahl as cited in H. Schwartz).

Salomone agrees with H. Schwartz in his description of two major dimensions of equity: political and social and economic. Political equities refer to those freedoms and rights guaranteed under the Constitution and to the extensions of these liberties granted through successive modifications to the Constitution. These kinds of equities have been less freely given by those who controlled them than they were taken by those who demanded them.

The Constitution, its Amendments, and the ensuing legislation and court decisions have always provoked conflict. But, according to Salomone, the fact remains, that as a statement of ideals, we are committed to the goals of equity in political life. However, he does not believe that Americans are committed to the principles of social and economic equity, either in theory or in practice.

Quite to the contrary, America is a land of opportunity, a nation that extolls the virtues of social and occupational mobility. It is a place where you can get ahead, not even. According to Salomone:
The egalitarian tradition in America has favored equality of opportunity above the others. Equality of treatment may be attainable in formal, impersonal situations which take place in organizational settings, but its likelihood in more informal circumstances is neither probable nor desirable. Equality of results is not a great concern in America. This conflict between political rights and social and economic realities remains a major issue confronting the authors as they assess the present status of equity.

**Equity in Vocational Education**

Vocational education is the education of people for work. Modern vocational education began with the Smith-Hughes Act of 1917. It promoted vocational preparation at the secondary level in agriculture, home economics, and trade and industrial education, and provided for the preparation of vocational education teachers. There was no mandate for an outreach to special populations. Instead, during the world wars, vocational education addressed itself almost exclusively to the utilitarian needs of business and industry rather than to the humanitarian needs of society at large. During the Kennedy and Johnson administrations, vocational education began to change in order to focus upon the achievement of some of the liberal social aims of the Great Society. The high level of unemployment among youth and minorities was the principal motivating factor behind new concepts embodied in the Vocational Education Act of 1963. Subsequent amendments continued this emphasis on outreach by adding incentives designed to encourage the participation of special populations (Choi and Hull).
Today, the definition of vocational education has been modified to mean the education of all people for work. Thus the evolution of a vocational education concept parallels that of equity. By 1976, the two concepts had been fused into the vocational education legislation (section 101 of Title II: Vocational Education, from the Education Amendments of 1976):

So that persons of all ages in all communities of the state... Those in high school, those who have completed or discontinued their formal education and are preparing to enter the labor market, those who have already entered the labor market, but need to upgrade their skills or learn new ones, those with special educational handicaps, and those in postsecondary schools... will have ready access to vocational training or retraining (which is) of high quality, which is realistic in the light of actual or anticipated opportunities for gainful employment, and which is suited to their needs, interests, and ability to benefit from such training.

The earlier passage of the Comprehensive Employment and Training Act had linked vocational education with human resource training. Also having an impact on both vocational education and human resource training were the Civil Rights Act of 1964 and subsequent legal and regulatory extensions. The passage of Title II of the Educational Amendments of 1976, however, clearly brought the three separate themes together in one piece of legislation. It also provided the planning and operational frameworks within the states for vocational education to take a leadership role in preparing all Americans for work (Evans, Fletcher, Choi, and Hull). The current relationship of all the equity-related legislation and regulations to vocational education is thoroughly documented in another work published by
the National Center for Research in Vocational Education entitled

The Administrator's Guide to Equitable Opportunity in Vocational
Education (1980). The reader is referred to this companion
volume for a discussion of selected equity-related legal mandates
and vocational education.

Comprehensive definitions of the special interest groups
covered by this legislation are also provided in The
Administrators Guide to Equitable Opportunity in Vocational
Education. The following abbreviated definitions of the special
needs groups discussed in this collection of papers are provided
for the convenience of the readers--

- **Disadvantaged persons** are those, other than the
  handicapped, who have academic or economic disadvantages
  requiring special types of services, aids, and
  programs to help them to be successful in programs of
  vocational education.

- **Handicapped persons** are those who have a physical or
  mental impairment that substantially limits one or more
  major life activities, who have a record of such an
  impairment, or who are regarded as having such an
  impairment. Handicapped persons include the mentally
  retarded, hearing impaired, deaf, speech impaired,
  visually handicapped, seriously emotionally disturbed,
  orthopedically impaired, or other health impaired persons
  with specific learning disabilities.

- **The limited-English proficient** are individuals who come
  from environments where a language other than English
  is dominant; and who thus have difficulty speaking
  and understanding instruction in the English language.

- **Older adults** are usually defined as persons in the
  fifty-five or above age bracket.

- **Racial/ethnic minorities** include Native Americans or
  Alaskan natives; Asian or Pacific Islanders; blacks,
  not of Hispanic origin; and Hispanics.

- **Women and men who experience sex discrimination** are those
  who have been limited in or denied opportunities,
privileges, roles, or rewards on the basis of their sex.

In summary, American society has continuously changed its concept of what is meant by both equity and vocational education. History indicates that the equity concept has progressively permeated the concept of vocational education. The legislative mandate of equal opportunity for all Americans, and for special action-oriented programs for those traditionally underserved is clear at the present time. It shows that most Americans see the attainment of equity as feasible and desirable. In 1980, however, there remain serious barriers to the achievement of equity in vocational education and employment. In the next section, the current status of equity in vocational education will be examined.
CURRENT STATUS OF EQUITY IN VOCATIONAL EDUCATION: PROBLEMS AND ISSUES

The authors of the papers are generally optimistic that equity goals in vocational education are achievable over time; however, a comprehensive understanding of the current situation is essential in order to propose and implement workable solutions for the future. Described in this section are eight commonly agreed upon problems and issues, concluding with a brief analysis of progress to date. To the extent possible, variety in opinions and viewpoints is included to illustrate the complexity of the issues.

The Scope of Vocational Education

Vocational education has become a major endeavor in our nation's educational system. In 1978, almost 28,000 different institutions enrolled 19,563,175 persons in various occupational programs. High schools, community and junior colleges, colleges and universities, area vocational schools, noncollegiate postsecondary schools, correspondence schools, business and industry, the armed forces, and correctional facilities all offered vocational education programs.* These students were served by 354,175 teachers, a growth of over 50 percent since

1973. Federal, state, and local support for vocational education reached $5,575,769,885.* The fact that the authors did agree upon a set of common problems and issues within this large and complex enterprise of vocational education makes it most important to set a decisive action-oriented agenda for the 1980s.

Status of Special Interest Groups within Vocational Education

While demonstrable progress has been made, equity for all persons has not been achieved in vocational education. The U.S. Office for Civil Rights issued "Guidelines for Eliminating Discrimination and Denial of Services on the Basis of Race, Color, National Origin, Sex, and Handicap" in 1979. The "Guidelines" were issued because of injunctive orders in Adams v. Califano, and because the Department of Health, Education, and Welfare had found evidence of continuing unlawful discrimination in vocational education programs. Examples of evidence cited by the U.S. Office for Civil Rights are as follows--

- Eligibility requirements such as residence within a geographic area or admissions tests deny vocational education opportunities on the basis of race, color, national origin, and handicap.

- Handicapped students are assigned to separate annexes or branches, or denied equal opportunities as a result of inaccessible facilities and inadequate evaluation procedures.

Vocational schools established for students of one race, national origin, or sex continue as essentially segregated facilities.

National origin minorities with limited-English proficiency are denied equal opportunity to participate in vocational programs. *

In spite of the many legislative mandates in response to the will of the American people, what is the status of special interest groups in vocational education today? The authors embellish upon the problems cited by the U.S. Office for Civil Rights and the ineffectiveness of the federal legislation to accomplish its mandates. A brief summary follows.

Of the 19,563,175 students enrolled in vocational programs in 1977-78, 75.4 percent of them were Caucasian, 15.8 percent were black, 6.0 percent were Hispanic, 1.7 percent were Asian-American and 1.1 percent were Native American. Minority enrollments are concentrated in certain vocational programs. Minority women predominate in health, consumer and homemaking, occupational home economics, and office occupations. The trade and industrial education area has the largest male minority enrollment. ** Although minority enrollment represents approximately 24 percent of the total, Samuel Proctor (1980)

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**Wulfsberg, p. 29.
We are faced with something of the magnitude of a half million young minority Americans who are out of work, out of school, out of jail, and alienated. They are described in editorials, portrayed in television documentaries, charted on graphs in sociology texts, and punched on IBM cards that read "Don't fold, spindle, or mutilate." Their socialization has been so negative and deficient that their dysfunction in society has become endemic. They live on temporary job "training" programs, street hustles, stealing, and parental indulgence. . . . Somehow, we were more attracted to the idea of going to the moon than we were to the challenge of making producers and taxpayers out of this segment of the population.

It is estimated that there are approximately 30 million handicapped persons in the United States: 2.3 million are children under seventeen who are functionally impaired due to chronic conditions; 7.2 million are between seventeen and forty-four; 10.3 million are forty-five through sixty-four, and 9.5 million are above sixty-five. From these estimates, it is projected that at least 17.5 million handicapped persons are potential beneficiaries of vocational education (Hull 1980). Estimates of handicapped students enrolled in programs, however, suggest that fewer handicapped students are enrolled in vocational education than are enrolled in all educational programs. Only 2.5 percent of the total enrollment in vocational education programs are handicapped, and they appear in disproportionate numbers in different vocational education programs.*

Approximately 12 percent of the total enrollment in vocational education programs are disadvantaged students, mostly

*Wulfsberg, p. 33
This figure does not take into account the high concentrations of urban youth. Approximately 49 percent of the 105,000 students of the District of Columbia public schools reside in families that are economically disadvantaged. These families frequently do not emphasize customs and habits associated with successful employment and do not provide adequate role models for their children in the crucial areas of work attendance, employment behavior, dress, and speech patterns.

A survey conducted by the Board of Trade/National Alliance of Business noted that 66 percent of those interviewed attributed attitudinal and social behavior problems as the major contributors to high youth unemployment. Another major contributing factor is the lack of basic skills. One-fourth of the students completing the fifth grade fail to graduate from high school. In 1977, one-fifth of each age group were high school dropouts, and 40 percent of black teenagers who wanted work could not find jobs (C. Schwartz and Thrane).

Those with limited-English proficiency also experience problems with achieving basic skills. Crandall states:

Though Title VI of the Civil Rights Act of 1964 prohibits discrimination on the grounds of race, color, or national origin, the bitter reality is that those who grow up speaking another language, through their family or neighborhood, without acquiring adequate proficiency in English, have greater difficulty both in becoming educated or trained for a vocation and in acquiring jobs which provide an opportunity for mobility and advancement.

One in eight persons today is of another language background, and that percentage is likely to increase. In many urban school systems, the number of students of limited or non-English background is increasing at a tremendous rate. For example, by 1985, the population of the Los Angeles County Schools will be more than 50 percent Hispanic (Crandall). Yet only 0.7 percent of the total enrollment of vocational students are those with limited-English proficiency.*

In summary, some minority, disadvantaged, and limited-English proficiency students suffer because they do not possess the basic skills, and thus are at a disadvantage even before entering vocational programs. The resulting inability to complete vocational training programs often means unemployment.

The push to have everyone move from secondary to postsecondary or four-year colleges floods the job market with degree-holding persons. Postsecondary students then replace secondary students in the job market. These secondary graduates then find jobs in the secondary labor market forcing the "dropout" not to have even a chance for the most menial job. Thus it becomes more lucrative for the disadvantaged individual with high expectations of what life in America is all about to join the welfare roles where high subsidies from the public assistance pocketbook discourage people from assuming menial work (Thrane).

Older adults have similar problems to other special interest groups. Because of the growth in this population group, it is projected that these individuals will have a major impact upon vocational education and employment in the future. The older

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*Wulfsberg, p. 38.
adult population increased from 4.9 million in 1900, to 32.8 million in 1977, while the population under sixty years of age increased at only one-fourth this rate. Due to increased longevity, the age sixty-plus population will more than double between now and 2035, while the total population will grow about 40 percent. Yet 15 percent of older adults are functionally illiterate. The average urban dweller over age sixty-five has had only eight years of formal education. The proportion of the functionally illiterate is much higher for minority older adults (Sheppard).

Ironically, while people are living longer, they are retiring earlier. This phenomenon confronts America with the serious problems of the cost of providing retirement income and a high quality of life for many citizens who may spend twenty or more years in retirement. While the number of retired citizens will grow dramatically in the coming years, the active workers available to support programs for the older adult will decline (Sheppard).

The surge of 42 million women into the work force will also have a dynamic impact on postsecondary vocational education in the 1980s. Over half of all women between the ages of eighteen and sixty-four are currently employed outside the home, and nine out of ten will work sometime during their lives. Statistics from the U.S. Department of Labor in August 1979 showed the highest female job participation rate in history. Nearly two-thirds of these working women were single, widowed, divorced,
separated, or had husbands whose annual earnings were less than $10,000 (Cardenas, Eliason, and Salomone).

Yet the distribution of enrollments by sex in vocational education programs reveals the persistence of definitive patterns of sex stereotyping. Women are concentrated in the health, consumer and homemaking, occupational home economics, and office occupations, while men predominate in the agricultural, industrial arts, technical, and trade and industrial occupations. Since 1972, some progress has been made in integrating females into traditionally male occupations, but this process has been slow. The percentage of increase in the number of women has been greatest in agriculture (the smallest program in enrollment size) and the smallest in trade and industrial (the largest program).

Men continue to supply over 80 percent of the enrollments in agriculture, industrial arts, technical, and trade and industrial programs where some of the best jobs are currently available.*

Many authors discussed the numerous and complex reasons underlying the pervasiveness of sex segregation in occupations (H. Schwartz, Eliason, Richette, and Evans). These reasons will be explored in subsequent sections.

The Compounding Effects of Multiple Membership in Special Needs Groups

Many members of one special needs group are also members of others. An example is the Hispanic woman of foreign descent who

* Wulfsberg, p. 27.
is poor. She could be a member of four special needs groups: female, minority, disadvantaged, and limited-English proficient. In 1975, the incidence of poverty had dropped to 12.3 percent of the total population. However, the incidence of poverty continues to be high for minorities and female heads of households (Cardenas). This compounding effect can also be found in subcategories of any particular special needs group. Within the category of "women" there are adolescent mothers, minority women, displaced homemakers, older women, and single mothers (Eliason, Evans, and H. Schwartz 1980). Any one of these subcategories may have special needs beyond those traditionally associated with the entire group.

In many instances a woman may have children who are too old for her to be eligible for social security. She has probably never worked for pay outside the home; consequently she cannot collect unemployment compensation. She is often too young to receive old age benefits, nor does she fit any other category of federal or state financial aid. Institutions often have similar restrictions and age limitations on the types of financial aid for education which they may offer (Eliason).

The compounding effects of multiple membership are also illustrated by those with limited-English proficiency. These adults often have low educational levels, lack basic literacy and computational skills, and are poor and disadvantaged in other ways. They face problems relating to transportation, child care, health, and housing. Older adults are another group that frequently has multiple memberships in special needs groups. In 1975, adults over fifty-five represented only 19.7 percent of the labor force, but they were 23 percent of the low-income
population, 30 percent of all heads of households, and 11 percent of the recorded unemployed (Sheppard). The added burden of multiple membership in special interest groups is shown in the differences between Caucasians and minorities:

Equally important factors in limiting the social and occupational mobility of blacks and ethnics, however, are the barriers resulting from the culture of poverty into which so many of these people are born. The negative effects of poverty are felt by poor whites, too, but blacks and ethnics have been deprived of the opportunity to move into the economic and social mainstems of society for so many generations that they are overrepresented in the poverty enclaves of American society (Cardenas and Welter).

Though many of the authors describe situations involving multiple membership in special needs groups, few authors attempt to separate these compounding effects or to project multifaceted solutions targeted at specific combinations of factors. The current status, as reflected in these papers, appears to be acknowledgement of the problems of multiple memberships, while projecting solutions aimed at one group or issue.

Barriers to Students

All the authors discuss students' barriers to full participation in and benefit from vocational educational programs. Some look at barriers from a philosophical viewpoint. Evans describes barriers as primarily "climatic influences": the equity commitment of the general education system; the vocational educators' operating concept of equity; the counselors' role; the attitudes of the community; and the students' orientation toward the world of work. Others discussed situational barriers such as
transportation, child care, or income level. Most authors' concepts of barriers, however, can be fitted into three broad categories: societal, institutional, and individual.

Societal barriers are those outside the individual. They include the attitudes and traditions of the society. Salomone believes that:


... because of our history of discrimination, benign neglect, and blatant subordination, minorities, the poor, the powerless, and the uneducated constitute an American underclass who have no way of obtaining an even start with the more advantaged classes in society.

Proctor describes barriers in terms of the conflict inherent in the American dilemma discussed earlier:

The accent in our society has been on competition and success, success being the mark of personal supremacy. This attitude is passed down through the whole system; and education becomes, therefore, a series of scratch lines with one peak after another. This process is designed to select winners and losers, and to fill cases with trophies, ribbons, and plaques. So much emphasis is placed on winning. This self-regard enlarges to group regard and class regard. Our positions are jealously guarded. Instead of fostering community, this kind of self-reliance fosters strife, competition, and subtle forms of preferentialism (Proctor).

Institutional barriers, as defined by Evans, are of two kinds: accessibility and programmatic. Accessibility barriers are those that deprive individuals of access to and use of vocational facilities due to design, construction, and location. Programmatic barriers include policies, procedures, and actions by educational personnel that consciously or unconsciously limit meaningful participation. Examples of programmatic barriers include admissions policies, recruitment practices, counseling, etc.
services, and curricular materials.

Personal barriers are those within the individual. These may be the result of socialization, influence of family, physical circumstances, or other causes. People's concepts of their roles in society and their attitudes toward job training and work may prevent career decisions that are realistic in terms of needs, interests, and abilities. H. Schwartz and Eliason discuss the personal barriers confronting women entering nontraditional vocational programs:

The most common characteristic of the adult reentry woman is a lack of self-confidence in her own abilities. She finds herself in a general depression, accompanied by an identity crisis, and has a low self-concept and expectations. The elimination of the low self-image of women reentering college or directly entering the labor market is crucial to their success (Eliason).

Proctor, Thrane, and C. Schwartz examine the attitudes of youths who have grown up in families where unemployment has been a way of life. These persons do not necessarily understand behaviors appropriate to successful job performance.

Barriers in Vocational Education Programs and Services

Thrane summarizes the overall frustration of the authors with the current status of the vocational education delivery system as it affects special needs groups:

The public schools with a vocational education delivery system were designed to reach a specific group of persons with middle-class needs and values. This system with rigid class hours, course work requiring two or three years for completion, tightly designed curriculum based on science and math is not geared to coping or to handling the myriad of social
and emotional problems of depressed, unemployed, desperate youth who look at the world as a jungle of materialistic desires.

Most of the authors concentrate upon the relative "readiness" of special needs populations for vocational education or work because of their inadequate skill levels. A lack of basic skills (verbal, grammatical, spelling, writing, and mathematics) was cited by numerous authors as the reason for unemployment and inability to enter vocational training programs (C. Schwartz, Crandall, Adams, Sheppard, Hull, and Eliason). Authors were also frustrated with tests as admissions criteria. Irving Kovarsky summarizes the state of knowledge with regard to admissions testing:

Since we do not know how to separate pure intelligence from past experiences and the motivation to learn, tests at best measure only past experience, motivation, and opportunity.

Crandall feels that most tests are simply tests of English proficiency, thereby eliminating from vocational training those insufficiently skilled in the English language. Sheppard discusses the pervasive attitude that learning ability decreases with age. Many authors also agree that admissions processes promote the continued occupational segregation of special interest groups. Richette states:

Occupational exclusion is a powerful tool for the maintenance of a caste-like system particularly when the criteria for exclusion are immutable biological characteristics for which a manifest destiny can be assigned in the natural scheme of things.

Once admitted to vocational education programs, special needs students face many other barriers. A key issue for most students
is the availability of financial assistance (Hull, Thrane, and Crandall). Eliason illustrates the problem of financial assistance:

A key deterrent to reentry women is strictly financial. Neither postsecondary institutions nor the government make financial aid readily available to these women. Another important barrier is the lack of vocational counseling, guidance, and career education. Most authors feel such counseling and information is particularly necessary before entering a vocational education program. As mentioned above, most tests are culturally biased. To be discussed in a later section are the traditional attitudes and prejudices of the counselors and vocational educators themselves (Adams, Eliason, Proctor, and Thrane). Curriculum reform to better accommodate the interests and educational needs of special interest groups, and the need to emphasize retention of students are other major barriers of primary concern to the authors.

**Barriers to Job Entry**

The objective of vocational training is eventual job placement and success in a career. Many of the authors are concerned about the outcome of vocational education, i.e., the transition from training to employment. Some of the barriers encountered in this transition are a previous history of work in an unrelated field, or particularly for women, no previous work history; a lack of credentials, including educational credentials, or out-of-date credentials; a lack of access to job
information; and inadequate health (Sheppard). Sheppard's comments about older adults are true of other special interest groups. Frequently, they do not know where available jobs are, how to interpret job requirements and training opportunities, how to present themselves and their life experiences with efficacy, or even how to participate in the personnel selection system of a particular organization (Sheppard). Situational problems also complicate job entry. Examples are transportation to and from training or employment, child care, and the need to accommodate the handicapped by improved access and job restructuring (Hull, Thrane, and Crandall).

A major barrier to job entry is continuing employer discrimination (Cardenas). U.S. Bureau of Labor statistics for the second quarter of 1980 show a total unemployment rate of 7.5 percent with 13.4 percent of all blacks and 10.2 percent of all Hispanics unemployed (Kovarsky). A National Council on the Aging (NCOA)/Harris survey showed that 87 percent of the respondents who claimed personal responsibility for the hiring and firing of employees agreed that employers discriminate against older applicants (Sheppard). Of an estimated 17.5 million handicapped persons who are available for employment, more than 7.7 million are either out of the labor force or are unemployed (Hull).

In addition to negative attitudes and stereotypical assumptions among employers, there is a lack of incentives for business and industry to employ members of special interest groups. All persons, regardless of training or prior experience,
must be employed at the minimum wage, and the employer must contribute to social security. Business and industry are furnished no financial incentives for helping special interest group members, such as tax breaks for the costs associated with on-the-job training. The transition between school and work lacks flexibility. Youths graduating in May generally attend school full time and then expect to be employed. Most importantly, there needs to be a partnership among the employer, the employee, and the vocational educator. A recognition and understanding of the skill levels and abilities of a given individual by the employer, employee, and vocational educator could decrease the unfortunate placement of persons in positions where they cannot succeed.

Barriers to job entry are also due to changes in the nation's economy. Is equity thought of in the same or similar terms in economies of growth and economies of decline? Does it matter that America is rapidly moving out of this age of affluence toward an age of relative scarcity? What happens to the ideals of unlimited upward mobility, to the ambitions the working class have for their children, to the hope that vocational educational attainment will act as a conveyor belt to occupational success? Are vocational education programs able to keep up with the changing needs of the economy for different skills and job preparations? These and other questions are raised by Salomone.

Vocational Education Personnel

The authors are critical of the lack of heterogeneity and the
current attitudes of teachers, counselors, and administrators at all levels within vocational education. Profiles of personnel characteristics suggest that there have been very limited efforts to ensure that vocational educators mirror the heterogeneous nature of the students. Traditional sex distributions among instructors predominate. Males hold the majority of positions in agriculture, distribution, technical, trade and industrial, and industrial arts programs. Females hold the same traditional majorities in health, occupational home economics, and office occupations. Racial/ethnic minorities represent 10.8 percent of all instructional staff and are similarly concentrated in certain fields.

Caucasian males hold an overwhelming majority of most senior positions. Ninety percent of the directorships in agriculture, distributive education, technical, and trade and industrial vocational programs are held by males while females dominate only in health and home economics. State level positions exhibit even more extreme imbalances. Sex equity coordinators are 98 percent female in contrast to state directors of vocational education and executive directors of state advisory councils who are approximately 98 percent male.* Such staffing patterns can mean a continuing predominance of traditional ideas, a need for extensive inservice training, and an emphasis upon affirmative action in hiring where vacancies occur.

* Wulfsberg, p. 55ff.
Welter describes the resulting attitudes among vocational education personnel:

The starting point in turning around enrollments in vocational education programs must be the elimination of the biases of vocational teachers, teacher educators, guidance counselors, and school administrators and instilling in them a total commitment to equity in all vocational programs. This is the greatest challenge facing vocational teacher education, and the difficulty of doing this is compounded by the fact that many of us in vocational education are biased ourselves (consciously or unconsciously) because we have grown up in and been conditioned by a society in which men and women each have had rather well defined roles; in which blacks and other minorities often have been assigned negative personal attributes relating to intelligence, industriousness, and work roles; and in which the handicapped have not been considered... a part of the mainstream of society. Because those of us in teacher education have been an integral part of a society in which such stereotypes exist, we must examine our own beliefs, feelings, and actions to determine where we really stand on the issue of equity.

Other authors express that same understanding of the difficult task of changing the attitudes of those who deliver vocational education at all levels. Thrane discusses ethnocentrism:

"Different" means exactly that—not better than or worse than. The mistake that many vocational administrators make is to attempt to rationalize or justify inequitable educational opportunities by citing individual or cultural differences... public education in America has been based primarily on American middle-class cultural and racial ethnocentrism. Cultural pluralism must necessarily involve philosophical realignment... in the development of educational personnel if we are to achieve the goals that may be established to ensure cultural pluralism.

Adams talks about the need for vocational education administrators to realize that barriers to equity are based upon the limitations of the educational institution rather than on the
limitations of potential students. Proctor and others urge curriculum reform to meet the needs of diversified populations. In order to begin curriculum reform, however, vocational educators must become sensitized to the socialization patterns of special interest groups and be able to counteract their deleterious effects. Proctor sums up the problem:

Vocational technical teachers are professionals, and just as engineers must know the properties of all the materials they use, and coaches must know the speed, weight, endurance, and marital condition of all of their players, and physicians must know the pharmacology of all the medicines they prescribe, so must a professional vocational-technical teacher know the pupils to be taught. This is a quality that can be learned.

Teacher certification and recertification standards are targeted for reform by some authors. For example, only a small number of states have adopted certification requirements that ensure any level of competence among persons responsible for vocational instruction for handicapped students. Beginning trade and industrial instructors in Texas are spending 900 hours each school year attempting to teach very vulnerable children, with a working knowledge of the problems of special students limited by the six clock hours of instruction mandated in that state (Hull).

Public Satisfaction and Support

In the past decade, there has been an erosion of public confidence in the American educational system and in the educators' ability to solve numerous educational problems including equity in job training and placement.
Russell in their analysis of trends likely to affect vocational education in the 1980s state that public satisfaction or dissatisfaction over the quality of education will be an important consideration and may have a dramatic impact upon curriculum and public funding support.* Choi states it very simply, "The cancer of equity is the absence of public interest."

Within the educational establishment, persons employed in college and general education preparatory-programs do not support vocational education as an acceptable or equal status alternative. In some state systems vocational education has been utilized as a dumping ground for slow-learners, students with learning disabilities, and unmotivated, disruptive youth (Evans).

Within communities and among special interest group leaders, occasionally there is a lack of cooperation and communication. Each group is preoccupied with eliminating the barriers it faces. The result is a lack of joining together to look at the common barriers encountered by all groups. The unique viewpoints of various authors are of particular interest here. Adams looks at intergroup communication and collaboration from an administrative viewpoint. He is concerned with the best possible use of the limited funding resources available. Since each group is preoccupied with its own needs, the advocates of each group frequently do not cooperate to the extent possible. This makes it difficult for decision makers to identify priorities for

*Lewis and Russell, Trends, Events, and Issues Likely to Influence Vocational Education in the 1980s, p. 140.
funding purposes. Thrane and Crandall examine community attitudes:

In urban American, ethnic pockets that are many blocks long and many blocks wide form struggling communities attempting to adhere to the ways of their ancestors. This often means keeping women and handicapped close to home. Asian American, Spanish-speaking populations, Africans—all find security and comfort in their own bailiwicks. The threat of outside influence or encroachment on their sacred turf causes consternation and even gang war. Because of the close relationship within each community, community leaders feel that help can come only from within. Community leaders see themselves as having the experience and capability of handling the social and economic problems of the minority and the disadvantaged. The disadvantaged persons in turn look to their own community leaders for answers to their plight (Thrane).

The distance between the decisions being made by administrators such as Adams and the feelings of the racial/ethnic communities expressed by Thrane needs to be bridged through improved communication; however, the assumption here is that members of the community want vocational education programs. Crandall points out the differences among cultures in people's attitudes towards education. For many, education is appropriate only for children or for a few scholars. The concept of life-long education for adults pursuing training leading to vocations is foreign and must be explained.

Finally, vocational education cannot influence the job market; instead, the job market must influence vocational education. Vocational educators, community leaders, advocates of the needs of special interest groups, and leaders in business and industry must all understand each other better and work together if the benefits of vocational education for all Americans are to be realized.
Funding Priorities

A major problem with the achievement of equity in vocational education is the procurement of funds to provide the services that special interest groups must have in order to participate in and benefit from vocational education. Authors are in agreement that funding priorities and policies, though greatly improved with Title II of the Education Amendments of 1976, remain a problem. Hull comments that for every dollar the federal government spends helping handicapped persons become independent, it spends ten dollars on programs fostering dependence. Thrane and C. Schwartz discuss the inhibiting effect of the minimum wage requirement on business and industry which may wish to employ and help train unemployed youth. Choi cites discrepancies in funding between urban and rural population areas. Adams discusses problems of setting funding policy. The availability of adequate funds and their allocation are important problems, particularly when it is difficult to calculate the costs of serving special interest groups adequately. With fixed amounts of funds, can money be distributed to encourage institutions with a poor record of providing vocational education on an equitable basis without discouraging institutions that are implementing strategies for removal of equity barriers? (Sheppard) Similar questions recur throughout the papers.

In looking at expenditures for 1977-78, funding for special interest groups appears to be a small proportion of the total. Furthermore, a decline in support for the handicapped and the
<table>
<thead>
<tr>
<th>Funding Priority*</th>
<th>Amount Expended</th>
<th>% of Total Spent</th>
<th>% Federal</th>
<th>% State/Local</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total, Vocational Education</td>
<td>5,575,769,885</td>
<td>100</td>
<td>8.8</td>
<td>91.2</td>
</tr>
<tr>
<td>Handicapped</td>
<td>232,613,303</td>
<td>4</td>
<td>19.2</td>
<td>80.8</td>
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<tr>
<td>Disadvantaged</td>
<td>470,045,548</td>
<td>8</td>
<td>16.6</td>
<td>83.4</td>
</tr>
<tr>
<td>Limited English Proficiency</td>
<td>19,009,579</td>
<td>.3</td>
<td>12.9</td>
<td>87.1</td>
</tr>
<tr>
<td>Economically Depressed Areas</td>
<td>201,870,636</td>
<td>4</td>
<td>10.3</td>
<td>89.7</td>
</tr>
<tr>
<td>Women's Programs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supportive Services</td>
<td>586,496</td>
<td></td>
<td>12.8</td>
<td>87.2</td>
</tr>
<tr>
<td>Day Care</td>
<td>805,160</td>
<td></td>
<td>4.5</td>
<td>95.5</td>
</tr>
<tr>
<td>Displaced Homemakers</td>
<td>2,432,778</td>
<td></td>
<td>29.5</td>
<td>70.5</td>
</tr>
<tr>
<td>Overcoming Sex Bias</td>
<td>4,370,369</td>
<td></td>
<td>27.1</td>
<td>72.9</td>
</tr>
<tr>
<td>Total Expenditures for Women</td>
<td>8,194,803</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Information about racial/ethnic minorities not available.

Taken from: Summary Data: Vocational Education Program Year 1978, p. 11, 15, 16.
disadvantaged at the state and local levels can be seen between fiscal years 1978 and 1979 with the infusion of additional federal dollars for these groups. In spite of the funding priorities in Title II of the Education Amendments of 1976, funding for special interest groups remains a small proportion of the total spent on vocational education (see table I).

**Information for Decision-Making and Current Research Priorities**

Researchers and policymakers encounter many problems in the collection of data about special interest groups' participation in and benefit from vocational education programs. For example, the data in Table I on the preceding page do not even include information about racial/ethnic minorities. Wulfsberg describes some of the complex problems in collecting data about special interest groups. Without the results of proper diagnostic examinations, a school could run legal risks by categorizing students as handicapped, particularly if they or their families did not approve of such categorization. Identification of the limited-English proficient is also difficult, requiring information about the student's nationality, mother tongue, and dominant language in the household.

Standards for data collection in vocational education programs have varied greatly among the states. This problem is

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*Wulfsberg, p. 78.
**Ibid, pp. 39ff.
being corrected with the implementation of the new Vocational Education Data System (VEDS) that will provide for the collection of standardized information from each state.

Enrollment data by program are readily available but completion or outcome data are more difficult to obtain. What are outcome data? Does the term outcome data mean program completion, and, if so, how is one to know when programs are completed? Are outcome data obtained by measuring employment rates, job satisfaction, length of time employed, employment in the field of training, or all of the above? While realizing that an accurate assessment of the effectiveness of vocational education must include a number of variables (enrollment, completion, job placement, satisfaction, and costs versus expenditures), no author made recommendations about how to accomplish such an assessment.

Most of the authors are critical of the current status of research efforts in vocational education. C. Schwartz expresses the predominant sentiments:

Educational research is funded far out of proportion to the benefits derived. The results have been the proliferation of many documents, statistics, and test results. Most of these research efforts are of little practical benefit to the local vocational education program administrator or teacher. Most local program operators know what it takes for a more effective vocational training program, especially for the disadvantaged student. More money, more business, community, and labor organization support and involvement, and better programs in basic skill instruction and social behavior are necessary. Too often, however, it is more politically feasible for decision makers to emphasize the need for new and innovative approaches, rather than face the reality of advocating expenditure of public funds to support adequately the programs already in existence. I do recommend, however, that all public funds
expended in the future on vocational research be limited to those areas that demonstrate a direct benefit to the student served by the local area program.

Welter is critical of the numerous workshops and inservice training programs that he feels are repetitive and of little value. Along with other authors, in contrast to C. Schwartz, he recommends empirical research. He is also critical of the ways in which the findings of research are disseminated, saying that they are little used by those who need the information the most.

**Progress in Achieving Equity**

Eight major problem areas have been cited as impediments to the achievement of equity in vocational education. Though the authors concentrate upon probing problems and issues, they also describe some of the progress that has been made. This section about the authors' views of the current status of equity in vocational education will conclude with a brief overview of progress already achieved in preparation for the next section on recommendations for the future.

The principal reason for progress has been the recent legislation with its funding priorities, involvement of constituency groups, and emphasis upon special interest groups. Another major reason has been the emergence of increasingly powerful advocacy groups that have been successful in directing attention to particular problems, and that know how to use legislative commitments to achieve results. Other reasons cited are research findings; the production of improved curriculum,
testing, guidance and counseling materials; and improved teacher training materials and methodologies. The most important reason, however, is a positive attitudinal change about equity. This attitude expresses the feeling that barriers are removable once they are identified and understood.

Fletcher is the most optimistic of the authors in discussing the progress that has been made and the potential of Title II of the Education Amendments of 1976 for the future:

Available information indicates that progress has been made in providing equal access to and meaningful participation in vocational education programs since the passage of Public Law 94-482 in 1976. We can look with pride at increased special assistance and services provided so that the handicapped and the disadvantaged, including the limited-English speaking can succeed in regular vocational programs. Nontraditional enrollments—enrollments by women in vocational education programs that have traditionally enrolled primarily men—have increased. States have selected personnel to work full-time to assist the state board in furnishing equal educational opportunities in vocational education programs to persons of both sexes; and in eliminating sex discrimination and sex stereotyping from all vocational education programs. Programs have been developed to recruit persons into vocational education without regard to race, religion, national origin, sex, age, handicap, or veteran status. These are only a few of the many accomplishments. We cannot, however, rest on these accomplishments.

All the authors would agree with Fletcher's last sentence; however, some would feel that her optimism is exaggerated, and that much more needs to be done at the local, state, and national levels to achieve the full promise of the 1976 legislation. The authors' ideas about what needs to be done are examined in the next section.
RECOMMENDATIONS FOR THE FUTURE

The authors include in their papers a wide variety of ideas for making progress toward the achievement of equity in the 1980s. These ideas are grouped under six general themes--

- implementation of Title II of the Education Amendments of 1976
- improved communication and shared responsibility
- training of vocational educators and administrators
- curricula and services
- funding alternatives
- research priorities

Readers are encouraged to look at the numerous practical suggestions for solving particular problems that are made by the individual authors, particularly those writing about the vocational education profession and the needs of special interest groups.

Before examining the authors' recommendations, a brief overview of projected trends for the 1980s in vocational education may be helpful. Lewis and Russell anticipate significant influences upon vocational education. Some of the most important trends for their potential effects upon the achievement of equity are as follows--

- A decline in the proportion of the gross national product that education receives will occur because of the pressure to reduce government spending, competing demands for public funds, and public dissatisfaction with the quality of education.

- Federal education legislation will continue to focus on providing services to special interest groups and on overcoming sex stereotypes.
Demographic patterns will lead to increasing numbers of older adults participating in vocational education. As a consequence, there will be fewer new entrants into the labor force.

With fewer young people in the population and a higher proportion of all young adults attending regular colleges, vocational education programs can expect to enroll increasing numbers of the educationally disadvantaged. These groups will cause the kinds of services traditionally offered to change and expand. Remedial education programs will likely be more prominent along with flexible scheduling; entering, dropping-out, and re-entering; and an increase in the number and kinds of cooperative agreements with business, industry, labor, and the armed forces.

Vocational education will become increasingly more competency based. This will allow greater flexibility for individuals to progress at their own learning rates and build upon their individual knowledge backgrounds.*

Implementation of Title II of the Education Amendments

Authors writing from the perspective of vocational educators feel that the mandate for achieving equity is within the current legislation. The Title II Amendments require states to manage their vocational education efforts within specific guidelines in order to receive funding. These guidelines include state planning, involvement of constituency groups, funding allocations, regular evaluation and accountability, and the provision of standardized data for the Vocational Education Data System (VEDS). VEDS, when fully implemented, will represent a major improvement in the collection of reliable and useful data for program monitoring and decision making within states, and for

*Lewis and Russell, pp. 138ff.
comparison among states.

To achieve the aims of the legislation, however, there must be a commitment to equal opportunity that is unmistakably clear at the top levels of state administration, and that is communicated from the top levels to the state board, all state vocational staff, and all persons involved in the implementation of state vocational education activities at the local level. Then leadership on behalf of equity should be evident in all state and local programs, planning, inservice training, evaluation, and advisory committee recommendations (Fletcher, Evans, Thrane, Adams, and Welter). Authors are generally in agreement that a national policy for vocational education should require state and local involvement in program planning and implementation, and a clear delineation of roles and responsibilities at each level. Adams states that:

Most boards of education are insistent upon local control of education. As a result, the board prepares and adopts school philosophy, policy, and rules to deliver the education program desired by the community. . . . For any program to be successful it is necessary to have local enthusiasm and support. . . . Consequently, a concern to be considered is the identification of who will form policy, develop plans, monitor operations, and evaluate the results. The implementation of a national policy in equity must include a method of generating state and preferably local involvement with commitment.

At the state level, the state board is responsible for coordinating development of policy and the five-year state plan, evaluation and accountability, and consultation with the state advisory council and other appropriate state agencies and individuals. Some exemplary state systems, operating under the
Title II mandates, demonstrate the effectiveness of the federal legislation in the achievement of equity in vocational education at state and local levels.

**Improved Communication and Shared Responsibility**

Most authors discuss the lack of communication among various groups involved in vocational education and the different priorities, emphases, and conflicts needing resolution. In order to achieve equity, shared commitment to specific goals is needed. To obtain shared commitment, however, requires the establishment of mechanisms to ensure communication among vocational education personnel at all levels; industry and other employers; organized labor; community leaders, agencies, and organizations; special interest advocacy groups; legislative advisory groups; students; and potential job seekers.

Effective communication and shared responsibility are ambitious goals. Kovarsky points out that the legislation which helped to create labor unions also helped to create an employment environment which even today perpetuates practices that are legally discriminatory. Thrane states that community-based organizations are the greatest opponents of vocational education because they feel that they are unique in their ability to develop innovative programs having the support services needed by their clientele. Crandall discusses the culturally based beliefs of many ethnic groups about the role and appropriateness of education and the possible loss of self-identity in the
acquisition of English skills. H. Schwartz describes the role of parents and the very early age at which sex-role socialization about appropriate careers occurs, thus limiting the vocational perspectives of students. Adams feels that provincial sentiments among rural and small town school districts can prevent or decrease the potential for cooperative arrangements and the sharing of students, staff, equipment, and facilities. He also discusses the phenomenon of black leadership discouraging black youths and adults from enrolling in vocational education because of their historically based fear that blacks will be relegated to nonprofessional or technical jobs. He feels that both blacks and whites continue to maintain the erroneous notion that a college degree is the only route to affluence and influence, regardless of the abilities, aptitudes, or aspirations of the individuals involved (Adams).

Despite these and other barriers, the authors all advocate improved communication and shared responsibility among the various groups who can make a contribution to equity in vocational education. They also feel that these groups understand that to achieve progress will require sharing responsibility.

Business is not insensitive to the educational and vocational training needs of unemployed youth. In the report by the Metropolitan Washington Board of Trade/National Alliance of Business, reasons why business is concerned about youth unemployment are presented: ... the business community wants to raise the quality of entrants into the labor force and encourage their commitment to our economic system. It wants to help alleviate the difficulties many young people face in securing training and employment. It wants to help minimize the interrelated public problems of
employment, welfare, community unrest, and crime. It wants to help youth acquire a sense of dignity and responsibility (C. Schwartz).

Positive attitudes and good will on the part of those concerned will also alleviate unnecessary duplication of services among agencies.

Training of Vocational Education Personnel

Increasing the heterogeneity and improving the attitudes of current vocational education personnel through affirmative action and training programs emphasizing equity are major concerns of the authors. Salomone explains why the concern is so great:

But educational institutions do more than simply teach skills. They shape values, form attitudes, develop opinions, establish convictions, and generally affect our national belief systems. This is true of formal education wherever it is found. Though developing a personal values system may not be taught as formal course work, it is nevertheless learned, shared, and transmitted in vocational education as well as in traditional academic settings.

Among their recommendations are the need for inservice training of current administrators, teachers and counselors, and preservice training for future teachers and administrators. Recommendations for vocational educator training took many forms. For inservice training, Evans recommends a needs assessment approach. What types of people are already benefitting from vocational services? How are their needs being met? What other groups of people could benefit? Why are these groups not utilizing the resources? Needs assessments that answer these questions could serve to identify those who do not have full access to vocational education and the barriers that are keeping
them from access and participation. Adams wants to rectify the image vocational educators have of themselves as being "second best." He feels that many teachers, parents, board of education members, school administrators, and citizens share the fallacy that a college degree is the best and surest way to occupational success. Thus he feels that inservice training programs stressing equity must include a positive image of quality vocational programs and the valuable outcomes to be obtained. Vocational educators must examine their own attitudes and biases and must learn about special interest groups in order to serve them.

There are many ways to eliminate barriers and to create a climate that permits students to develop to the best of their ability. The most important ingredient...is the teacher. Over and over again we hear the student who has failed say, "Nobody cares about me; I ain't no good." It takes special teachers who care plus an administration and school board who are willing to pay the costs of alternative methods and situations to assist the...disadvantaged with social, economic, or language problems (Thrane).

Proctor expands upon Thrane's message about the importance of caring. He recommends three essential attributes for all vocational education teachers. First, all teachers should learn the history and background of all the students they are likely to teach. Second, there is no pedagogical "quick fix" available, nor are tests any measure of ability in multicultural groups. Therefore, a teacher must search for and all indices of learning ability and the varied and unusual promises of dormant capacity hidden beneath a veneer or obscured through isolation and deprivation. Then the teacher must figure out how to
capitalize on these hidden strengths. Third, teachers must clarify their values with respect to the issue of justice and fairness and make their own determination of society's moral obligation to those who have benefitted the least. Welter discusses a variety of sensitivity training programs, the use of interdisciplinary teams, and the redesign of teacher education certification or recertification requirements as ways to achieve Proctor's aims.

Examples of the multitude of recommendations regarding vocational education teachers follow to illustrate the variety of viewpoints in the papers. The use of part-time instructors from industry who possess a high skill level and are willing to teach an occasional class is recommended. This strategy could increase the heterogeneity of the staff and decrease costs because these part-time instructors would be paid an hourly wage. Crandall recommends that teams of vocational educators and bilingual specialists work together to ensure that the specific English vocabulary that is needed is learned. Choi recommends that the emphasis not be placed solely upon vocational educators. He feels that all students in personnel administration, who are preparing for careers in industry or business, should be thoroughly taught the requirements of equity legislation, job analysis and classification, evaluation, and nondiscrimination. Cardenas et al. stress the need to include representatives of special interest groups on advisory councils and staffs of vocational education.
Curricula and Services

C. Schwartz sums up this author's recommendation regarding curricula and supportive services:

Vocational education programs...will serve their purpose only if the students (1) leave school in a state of basic literacy and with an ability to cope with verbal and mathematical concepts; and (2) enter the job market with sufficient technical skills to be able to function in a particular work environment. In addition, and of equal importance, disadvantaged students must be (3) "socialized" so that they can deal with the norms of the work environment...Unless youth who enter the job market have been inculcated with all of these basic elements, they are bound to fail.

All authors argue against lessening standards in basic literacy and mathematical skills. Instead, they recommend remedial training until an acceptable skill level is reached. They feel strongly that basic skills are essential to success in vocational education programs and on the job.

A second essential skill is sufficient vocational training to perform in the jobs that will be available. In examining trends, Lewis and Russell foresee an increase in technology. Computer applications, microprocessors, office word processing, communications, expansion of health care equipment, and a whole new field of biotechnology are only a few of the potential new fields.* Thrane points out that vocational education curricula should lead to the potential for employment in multiple jobs because of constant changes in the technological world. Training persons for narrowly defined positions will lead only to

*Lewis and Russell, p. 147.
frustration and eventual termination. Flexibility and breadth within a vocational area will allow the individual to enter and reenter vocational education programs to stay up-to-date.

Several authors discuss the benefits of entrepreneurial skills. Proprietary skills for small businesses or craft industries could be extremely beneficial to women, those in rural communities, older adults, the handicapped, and minority group members.

The third set of skills essential to success are employment skills, or how to get and keep a job. In order to get a job, the job seeker must understand how to fill in applications (particularly difficult for the limited-English proficient); how to prepare a resume and think positively about past experiences; how to interview; and how to sell oneself. To keep a job, students need training in behavior, dress, punctuality, interpersonal relations, and their employment rights. Thrane says:

Employment skills that assist the student to matriculate in the world of work must be learned. . . . Our entire economic system has set up middle-class values and standards. The employee is expected to dress properly for the job. If the person is a welder, the proper dress is hard hat, hard-soled shoes, long pants, long sleeves, and eye protectors. There is no alternative to this dress. If the shift begins at 7:00 a.m. it means arriving at work a few minutes before 7:00 a.m. and leaving when the shift ends at 3:00 p.m. Individuals must understand the rights of the employer, other employees, and their own. They must understand the importance of teamwork and want to be a part of the group with whom they are assigned.

Changes in the work and school environments are also recommended. Possibilities are flexible scheduling of work experiences and school, including cooperative work programs for on-the-job training; completion of secondary education programs
throughout the year; and frequent reentry into vocational education programs. Because of transportation problems and home responsibilities, flextime and other alternatives to full-time work are frequently mentioned. Several authors criticize programs for summer employment of youth and recommend year-round school/work experiences.

Supportive services are most important in building motivation. Career education, assessment of interests and aptitudes, vocational counseling, and improved information about the jobs available and the necessary skills for these jobs are all areas needing modification to ensure the inclusion of special interest groups. The need for career information services is particularly critical for persons entering nontraditional careers. These individuals also need encouragement from peers, instructors, and employers to change attitudes about earlier socialization patterns and concurrent societal pressures. H. Schwartz, Evans, Eliason, and Salomone analyze the problems of women entering nontraditional careers.

Nontraditional recruitment will be necessary to reach new prospective students. Many authors recommend more effective use of the mass electronic media including commercial and public radio and television. Mass media can be used to provide information about new technologies, new jobs, and the availability of training. Using mass media is one way of helping to change early socialization patterns and societal attitudes, particularly about women and the handicapped.
Funding Priorities

While acknowledging that Title II of the Education Amendments of 1976 set funding mandates to foster equity, the authors make recommendations for improvements, extensions, and revisions of these allocations. To decrease the high rate of unemployment experienced by American youth, particularly minorities, authors recommend removal of the minimum wage requirement and payments to social security within certain age categories, and authorization to use work-study funds for on-the-job training in locations other than local educational agencies. These recommendations would require changes in current legislation. Authors also recommend incentives to business and industry to encourage their participation. One suggested incentive is tax credits for those making special efforts to train and employ members of special interest groups. Better integration of CETA-funded programs and vocational education programs is also recommended. Other examples of the many recommendations with regard to funding priorities are child care, life-long learning, special services and equipment for the handicapped, and creative solutions to transportation problems.

While agreeing that funding for special interest groups is a national policy issue, authors differ in their opinions on this issue. Some feel programs that are free of barriers or that have experienced success in providing a more equitable environment should be rewarded; others feel that funding incentives should be
given to the reticent to make necessary modifications in programs and services.

Research Priorities

A major accomplishment of Title II of the Education Amendments of 1976 was the development and implementation of the Vocational Education Data System (VEDS). This system provides for the collection of standardized information from every state. It will provide the data base from which to examine numerous programmatic and policy questions within vocational education.

Though everyone had different research priorities according to their field of expertise, there were general trends among their recommendations. First, research efforts should be carefully coordinated and widely disseminated to avoid redundancy. Fletcher recommends locating, documenting, and disseminating the positive strategies and solutions that already exist as one major research effort of great value.

Second, authors advocate practical research with immediate applicability to programs. The practical research may take many forms. Frequently cited are new approaches to inservice training and curriculum innovation. Welter recommends the redesign of vocational teacher education programs. With regard to curriculum innovation, Crandall's recommendations are illustrative of the practical approach so many authors advocate. She states:

Although there is a clear relationship between job success and linguistic capability, and an even clearer relationship
between job access and language, we still have little research that identifies exactly what features of English are most important for employment and which can be left for later acquisition or be omitted entirely....Until we know, however, which of these (terms) are the most important or most salient, it will be difficult to know exactly what should be taught to persons acquiring English as a second language and in what order it should be taught. We also need additional research to show the strategies...used to reduce the language demands of jobs. When confronted by large manuals or reports, how much do people really need to read and what strategies do they use to accomplish that as quickly and painlessly as possible?

An example of the emphasis upon applied research with immediate applicability to program is the emphasis upon self-analysis instruments and methodologies. Using these tools, local vocational education personnel can look at themselves and develop strategies on their own to eliminate barriers. To accomplish practical and applied research, authors recommend that research be conducted by interdisciplinary teams so that an improved understanding of the special needs groups to be served by vocational education can be ensured.

Third, the research question of how to perform a comprehensive evaluation is raised by Thrane and H. Schwartz. What should be the evaluative criteria by which vocational educational programs can be assessed for their effectiveness in providing equity? Choi includes in this research priority the need for an evaluation of the enforcement activities undertaken by federal agencies to ensure that the equity legislative mandates are being met.

Finally, authors express interest in public policy research.
to examine the role of the federal, state, and local governments in vocational education, how programs are funded, and how these funds are used. The above-mentioned examples are only a few research priorities which authors recommend. More comprehensive research agendas about specific topics are included in some of the papers.
SUMMARIES OF THE PAPERS

This paper has sought to provide an overview of the many concerns expressed by individual authors about equity in vocational education. To accomplish this task, the paper has described common themes about today's major problems and issues, and common recommendations for the future. As this overview has shown, though much has been accomplished, the task ahead is a big one. Where do we begin? You are invited to begin by reading the insightful reflections of authors with special expertise who have many suggestions for contributions to achieving equity in vocational education in the 1980s. To facilitate your reading, brief summaries of all the papers follow:

Vocational Educators and Administrators

Richard N. Adams, superintendent of the Upper Valley Joint Vocational School District, views equity from his perspective as a vocational education administrator of a center serving rural high school and adult students. He speaks very practically about the issues and problems of achieving equity at the local level. Examples of topics discussed are: accessibility in a rural area, funding, counselor training, career education, provision of health and human services, and competency-based modular instructional packages. He recommends local commitment to and involvement in vocational education programs, and greater communication among parents, students, vocational educators,
Nancy E. Smith Evans, sex equity coordinator in Ohio, begins by summarizing the legal provisions for sex equity in Title II of the Education Amendments of 1976 and Title IX of the Education Amendments of 1972. After a brief summary of the history of women in the workplace to illustrate the tradition of occupational segregation, Evans concentrates on the challenges and responsibilities of sex equity coordinators. She makes numerous suggestions for the successful implementation of the legislation. Among her recommendations are the building of networks, inservice training for vocational education personnel, needs assessments to identify groups not having full access and the reasons why, and supportive services for those entering nontraditional occupations. Evans defines specific subsets of women and their particular problems and discusses the problems faced by men seeking to enter traditionally "women's jobs." Many of Evans' recommendations apply to other special interest groups and to vocational education in general.

Geneva Fletcher, deputy state director of vocational education, discusses the legislative requirements of Title II of the Education Amendments of 1976 and the responsibilities of state directors of vocational education for achieving equity. Fletcher believes that the legislation, if properly implemented within each state, is a tool for achieving equity. She analyzes the funding provisions of the Education Amendments of 1976 for their potential to contribute significantly to equity. She also
outlines how to incorporate equity in state planning and how to establish procedures and practices. She describes the governance, accountability, and evaluation provisions of the legislation. She makes many suggestions for implementing Title II, after a major discussion of institutional, personal, societal, and programmatic barriers.

Lucille Campbell Thrane, associate director at the National Center for Research in Vocational Education, writes about equity from the perspective of a large city director. The paper is an interesting contrast to Richard Adams', whose paper is written from the perspective of a director in a rural setting.

Thrane's discussion of equity issues emphasizes urban youth. She defines cultural pluralism and argues that equity in vocational education cannot be addressed until the more urgent problems of minorities, the disadvantaged, and those with limited-English proficiency have been addressed. Thrane focuses on the barriers facing urban youths enrolling in vocational education and provides many practical solutions to current problems.

Clyde W. Welter, professor of adult and vocational education, looks at equity issues from the perspective of his role as a faculty member. His responsibilities include providing preservice and inservice training for the preparation of vocational teachers at the secondary and postsecondary levels; performing research; and providing graduate education for those who aspire to leadership positions in vocational education.
Welter's deep concern about equity in vocational education is evident in his discussions of occupational segregation by sex, racial discrimination, the current attitudes of vocational educators, and the need to eliminate stereotypes. He makes extensive suggestions regarding how to change attitudes. He emphasizes the importance of multidisciplinary team efforts to bring about change and the importance of heterogeneity among those employed in vocational education.

Academicians

Gilbert Cardenas, associate professor of economics, analyzes various economic concepts of equity and cites the major theorists in this area. His paper studies the economics of equity as they relate to vocational education through analysis of the policy implications of equity in the development, planning, and administration of more responsive vocational education programs. Special concern is shown for the barriers that face minorities, women, and the handicapped in vocational education and employment. Cardenas cites numerous sources of information to illustrate the points he makes about the economic effects of inequities perpetrated against special interest groups.

Yearn H. Choi, professor of public policy, traces the history of equity in the area of public policy and then relates it to vocational education. He examines the philosophical underpinnings of the current values and concepts of equity in American society and the linkages among equity, vocational
education, and new legislation regarding manpower and employment. He believes that equity begins when all citizens have the opportunity for employment. After this philosophical, historical, and legal overview, problems that remain and progress that has been made within the current legal system are reviewed. He concludes with recommendations for research and public policy to enhance equity in personnel administration and vocational education.

Irving Kovarsky, professor of industrial relations, traces the legislative developments that affect equity in employment, either favorably or unfavorably. Through a review of federal civil rights legislation, Kovarsky describes the conflicts between federal laws and criticizes public policymakers, constituency groups, and legislators. To do this, he first describes specific problems in employment and their potential solutions. Then he illustrates the conflicts between equity and employment practices through an analysis of court cases. Examples of the subjects discussed are: seniority clauses in union contracts; testing; pregnancy and health-related benefits; bona fide occupational qualifications that serve to exclude; reasonable accommodation for religious beliefs; and the potential conflict between affirmative action regulations and nondiscrimination policies.

Lisa Aversa Richette, judge of the Court of Common Pleas for the state of Pennsylvania, defines equity as justice and fairness and traces the history of its development through law and court
cases. To illustrate her points, she uses cases relating to equity for women. Specific topics covered are the right to vote, the right to work, occupational segregation, and protective legislation based upon traditional stereotypes about women. She challenges the judicial acceptance of a protective doctrine under the Equal Protection Clause of the Fourteenth Amendment. Her paper includes interesting vignettes about women who struggled against the legal system to gain equity. As a major step forward in the achievement of equity, Richette examines (1) the passage of Title VII of the Civil Rights Act, (2) the accomplishments made since its passage from the perspective of cases won by women, and (3) the relationship of equity to the newer affirmative action mandates.

Jerome J. Salomone, professor of sociology, presents equity as an elusive, theoretical subject based upon an even more elusive, existential reality through an extensive review of the literature. His paper unfolds as a combination position paper and state-of-the-art presentation because of the mixture of fact and opinion and the imprecise definitions that characterize equity. The paper begins by setting forth a frame of reference for sociology and then specifies the nature of sociology's interest in equity and inequality. Salomone then examines occupational inequality by using data about women to illustrate his theoretical points. He concludes with a speculation on the role of vocational education in promoting equity in American society.
Henrietta Schwartz, professor of anthropology, focuses on the issues related to the cultural aspects of sex equity and schooling in American society. She begins with a framework of assumptions that relate the discipline of anthropology to concepts of equity. She defines schools as a subset of the culture and describes eight universal aspects of behavior common to each classroom, school, community, and culture. She also uses the eight universal aspects of behavior along with a definition of cultural pluralism as the conceptual foundations for an extensive review of the literature related to sex equity in socialization, schooling, occupational segregation, and attitudes about women's roles held by both women and men. Her paper concludes with recommendations for promoting equity.

Special Interest Group Advocates

Jo Ann Crandall, at the Center for Applied Linguistics, describes the special needs of adults with limited-English proficiency. She begins with an extended discussion of the many societal, institutional, and personal barriers faced by those for whom English is a second language. Crandall's paper is very practical in orientation. Her illustrative examples highlight the difficulties of persons with limited-English proficiency in finding and keeping work. In proposing solutions, she describes four potential curriculum models for teaching English as a second language as an integral part of vocational education. These models are based upon a clear understanding of the language.
skills needed to be employable and different learning patterns among individuals. Her paper concludes with a variety of teaching techniques and a research agenda for improving the teaching of English as a second language.

Nancy Carol Eliason, director of the Center for Women's Opportunities at the American Association of Community and Junior Colleges, describes the hidden barriers to full participation by women in vocational education programs with a particular emphasis upon the problems encountered by reentry women. Throughout her paper, Eliason discusses solutions to problems while describing the problems themselves. Eliason is particularly sensitive to the multiple needs of particular categories of women such as minority women, adolescent mothers, and displaced homemakers. Eliason concludes her paper with a description of the services needed to achieve equity in postsecondary vocational education.

Marc E. Hull, assistant director of special education and pupil personnel services in the Vermont State Department of Education, examines equity in vocational education from the perspective of handicapped persons. He begins with a definition of the handicapped individual and data about the numbers of handicapped individuals needing to be served by vocational education programs. His discussion of issues and barriers facing the handicapped includes: current funding disincentives for achieving independence; the underrepresentation of the
handicapped in vocational education programs; the attitudes of people responsible for vocational education programs; the problems of segregated vocational education programs and of accommodating the handicapped; the need to involve handicapped individuals in policymaking; the need for adequate funding for vocational education for every handicapped individual; the preparation of vocational education personnel to teach the handicapped; and the need for revision of curriculum materials. He concludes with recommendations and an extensive bibliography.

Samuel D. Proctor, professor of education at Rutgers University, challenges inertia and orient the reader to the current status of minority youth. He traces the current situation to the enslavement of blacks and their subsequent treatment after the Civil War. He then describes the development of a national educational philosophy for blacks based upon the theories of two prominent black educators: Booker T. Washington and W. E. B. DuBois.

Proctor has three major recommendations for "what do we do now?" He believes strongly that all teachers must study rigorously, experientially, and systematically the backgrounds of the minorities who will be their students. Black studies courses are essential to the professional preparation of vocational education teachers. He believes that vocational education teachers and counselors must search for all indices of learning ability in minority youth. He describes the limited capacity of tests to measure what they purport to measure. He feels that all
vocational educators must understand and acknowledge their own values with respect to the issues of fairness and justice to overcome prejudice.

Carol L. Schwartz, school board member in Washington, D.C. and a former member of the National Advisory Council on the Education of Disadvantaged Children, describes equity in vocational education from the perspective of the educationally or economically disadvantaged student. Her paper highlights the present conditions of the disadvantaged and recommends improvements in vocational education. Her discussion of barriers to the disadvantaged includes: lack of basic skills and motivation; family backgrounds; need for social counseling; need for exposure to employment; students' attitudes towards work; lack of adequate numbers of vocational program instructors; and the current minimum wage rate. Her lengthy experience in public education in Washington, D.C., enables her to cite many examples of successful programs and strategies to counteract barriers. She concludes her paper with a summary of her recommendations including the future of educational research and changes in federal legislation.

N. Alan Sheppard, special assistant to the director of the President's Commission on Aging, begins his paper with a comprehensive assessment of demographic trends and their impact upon vocational education and employment opportunities for older adults. Sheppard then describes specific equity problems. To do this, he uses an affirmative action continuum model for
discussing barriers to equitable job training and placement. Then taking the positive approach that the identified barriers are removable, Sheppard discusses strategies for their elimination under six general headings: federal legislation; federal support programs; advocacy groups; adjustments in personnel policies; educational strategies; and the training of vocational educators and the public to a better understanding of aging.


