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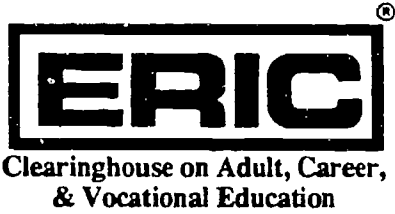
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## ABSTRACT

Vocational education can play a significant role in achieving the ideals of a diverse society. Although workplace changes and global economics make vocational education essential, an increasingly diverse population includes groups that have not traditionally participated extensively in vocational education. Philosophical and attitudinal changes that recognize the merits of a diverse society must precede the design of contemporary instructional programs that take an inclusive approach to recruiting and retaining in vocational education minorities, women, immigrants, disadvantaged persons, and students with special needs. The quest for diversity begins with a focus upon vocational teacher preparation, including awareness of attitudes toward persons from different backgrounds and preservice and inservice training in a multicultural approach to education. Techniques for accommodating learning styles and cultural differences are important tools for the diverse classroom. Recruitment and retention of diverse students into vocational teaching must also be emphasized. Program planners must become informed about diverse communities and involve their members in the planning process. Unlike the melting pot mentality of the past, a fruit salad approach to enhancing cultural, racial, ethnic, and gender differences will enable the nation to take advantage of the richness diversity promises. Visionary leadership will be essential as vocational educators act upon a commitment to diversity and play a significant role in enhancing and promoting it. (Contains 105 references.) (SK)

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# Enhancing Diversity in Vocational Education

by  
**Blannie E. Bowen**  
**Gary B. Jackson**

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## FOREWORD

The Educational Resources Information Center Clearinghouse on Adult, Career, and Vocational Education (ERIC/ACVE) is 1 of 16 clearinghouses in a national information system that is funded by the Office of Educational Research and Improvement (OERI), U.S. Department of Education. This publication was developed to fulfill one of the functions of the clearinghouse—interpreting the literature in the ERIC database.

ERIC/ACVE would like to thank Blannie E. Bowen and Gary B. Jackson for their work in preparing this paper. Dr. Bowen is C. Lee Rumberger and Family Professor of Agriculture, Department of Agricultural and Extension Education, Pennsylvania State University. He has served as Chair of the Involving Diverse Populations in Professional Development Committee of the American Association for Agricultural Education and as Secretary and Parliamentarian of Minorities in Agriculture, Natural Resources and Related Sciences. Among his publications are "Reaching New Audiences" in the *Agriculture Teachers Directory*, "Recruitment of Minorities into Natural Resources at the Ohio State University," and "The First 100 Years: Historical and Philosophical Contributions of 1890 Land Grant Institutions to Vocational Education." He was awarded the Distinguished Alumnus of the Year Citation by the National Association for Equal Opportunities in Higher Education.

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Ray D. Ryan  
Executive Director  
Center on Education and Training  
for Employment

## EXECUTIVE SUMMARY

Education, particularly vocational education, can play a significant role in achieving the ideals of a diverse society. On the one hand, workplace changes and global economics make vocational education essential. On the other hand, an increasingly diverse population includes groups that have not traditionally participated extensively in vocational education. Philosophical and attitudinal changes that recognize the merits of a diverse society must precede the design of contemporary instructional programs that take an inclusive approach to recruiting and retaining in vocational education minorities, women, immigrants, disadvantaged persons, and students with special needs.

The following forces, factors, and influences demonstrate the need for enhancing diversity:

- Legislation mandating service to a broader spectrum of the population
- Educational reform movements
- Increasing numbers of disadvantaged and special needs students
- An increasingly global society
- Technological changes transforming the workplace

The quest for diversity begins with a focus upon the vocational teacher. Teacher preparation must include awareness of attitudes toward persons from different backgrounds and preservice and inservice training in a multicultural approach to education. Techniques for accommodating learning styles and cultural differences are important tools for the diverse classroom. Recruitment and retention of more diverse students into vocational teaching must also be emphasized.

Diversity in vocational programming requires innovative instructional approaches to meet contemporary needs: dropout prevention, emerging occupational areas, self-sufficiency and life skills development, and retraining for adult immigrants. Program planners must become informed about diverse communities and involve their members in the planning process.

Unlike the melting pot mentality of the past, a fruit salad approach to enhancing cultural, racial, ethnic, and gender differences will enable the nation to take advantage of the richness diversity promises. Visionary leadership will be essential as vocational educators act upon a commitment to diversity and play a significant role in enhancing and promoting it.

Information on diversity in vocational education may be found in the ERIC database using the following descriptors: Cross Cultural Training, Cultural Differences, \*Cultural Pluralism, Educational Philosophy, \*Ethnic Groups, Intercultural Competence, \*Minority Groups, Population Trends, \*Student Recruitment, Teacher Education, \*Teacher Recruitment, Teaching Methods, \*Vocational Education, Vocational Education Teachers. Asterisks indicate particularly relevant terms.



## INTRODUCTION

The United States is increasingly recognizing that a society can be great and excellent if diversity is encouraged rather than suppressed through such concepts as melting pots and theories that promote homogeneity. However, to achieve the ideals of a great yet diverse society, countless struggles must be endured to educate the populace through a system of public education that has been predicated upon and dominated by the values, mores, and cultural heritage of Western Europeans in general and white males in particular. This publication examines problems and issues inherent in the quest to effect and enhance diversity in vocational education. Although most of the monograph focuses on race and ethnicity, issues involving culture, gender, and employment are also addressed under the definition of diversity.

This inclusive approach to diversity was chosen to address numerous issues that are emerging as the population of the United States becomes increasingly heterogeneous. However, from a research perspective, the vocational education literature base on the topic of diversity is extremely limited. Hence, this monograph is an attempt to synthesize that limited literature with the expectation that additional research will be forthcoming as vocational educators increasingly value and seek approaches to enhance effectively the diversity of their instructional programs.

In this section, a rationale is developed for a more inclusive philosophy of vocational education. In section two, the need for more diversity in vocational education

is developed based upon various contemporary issues, several demographic trends, and the desire of vocational educators to serve an expanding audience. In the third section, the need for diverse secondary and postsecondary vocational educators is examined. The impact of culture and related factors are addressed. A case is made for vocational educators who appreciate diversity before they can effectively develop and deliver instructional programs for diverse audiences. Instructional approaches that assist teachers in managing diversity are included in this discussion. Diversity in teacher education is the focus of the fourth section. Preservice and inservice educational needs of teachers relative to diversity are addressed. Innovative efforts to recruit into teaching students who have diverse backgrounds are also examined. The fifth section explores instructional programs needed to attract and educate effectively significant numbers of diverse youth. Concluding thoughts and recommended readings are offered at the end of the monograph.

### An Inclusive Philosophy

A Eurocentric perspective has been used by members of the United States' dominant culture to relegate culturally diverse peoples (African Americans, Mexican Americans, Native Americans, Asian Americans, etc.) to subordinate positions in society wherein discriminatory practices can be effected (Sue 1981). For example, when a person of color is accused of committing a crime, many newspapers and the broadcast media routinely identify the

accused person as black, Hispanic, or whatever that person's ethnicity happens to be. However, rarely is a white person identified in this manner. In addition, questions related to the participation of African Americans and other diverse groups in vocational education also illustrate how a mainstream culture can influence other cultures.

For an historical perspective, one plausible answer for the question of why many diverse groups, especially African Americans, have heretofore not enrolled in vocational education can be gleaned from *The American Negro* by Rayford Logan and Irving Cohen (1970). The setting for the explanation was a few months after the February 20, 1895 death of Frederick Douglass, the fervent abolitionist and foremost African American leader of the era. "For American Negroes, Douglass' death meant the loss of one who had helped them to bear a crushing burden of discrimination and hatred. It marked the close of an era in which the quest for freedom had almost been brought to a halt" (p. 147). Seven months after Douglass' death, a speech by Booker T. Washington at the Cotton States Exposition in Atlanta, Georgia, amplified the philosophical debate about the merits of vocational training versus a liberal arts education for people of color. In the minds of many African Americans, this debate still rages.

Washington's speech, which was presented during an era when segregation and Jim Crow tactics were rapidly expanding, was widely hailed by most whites throughout the country. The speech received extensive favorable press coverage throughout the land; President Grover Cleveland even congratulated Washington for his speech. Prominent white leaders of the era perceived Booker T. Washington to be a leader of his race and someone with whom they could counsel on matters

pertaining to Negroes. His Atlanta speech, the founding of Tuskegee University, and several significant educational achievements received such acclaim that in 1897 Washington became the first Negro to be awarded an honorary master's degree from Harvard University (Logan and Cohen 1970).

Even with this national and international recognition, however, many African Americans interpreted Washington's Atlanta speech to be an acceptance of segregation and second-class status in exchange for the promise of reaping economic gains. "Negroes would prosper only by devoting themselves to agriculture, mechanics, commerce, domestic service, and the professions" (Logan and Cohen 1970, p. 148). Washington's strongest critic, William Edward Burghardt DuBois, referred to the infamous speech as the "Atlanta Compromise." DuBois challenged Booker T. Washington on three major topics: (1) being conciliatory toward segregation and the South, (2) focusing excessively on the accumulation of wealth, and (3) promoting vocational training at the expense of a liberal arts college education.

Even though the W.E.B. DuBois-Booker T. Washington debate over the merits of vocational education reached its height during the first part of the 20th century, many diverse populations have questioned and still question the merits of this type of education. However, for almost 200 years African Americans have been involved extensively in various forms of vocational education (Hall 1973). When slavery was being instituted in the United States, many slaves as well as free blacks participated in various types of apprenticeship training. In addition, prior to the 1960s, numerous African Americans enrolled in vocational education courses, especially in the South where segregated high schools existed until the 1960s. In 1965, however,

when the black New Farmers of America (NFA) vocational student organization was merged into the white Future Farmers of America (FFA) organization, the disintegration of African American participation in secondary agricultural education was accelerated.

Six years prior to the merger, 51,205 African American students were NFA members in some 1,039 schools (NFA 1960). Today, the number of African American students who enroll in secondary agricultural education courses and become members of the FFA does not approach 50,000. Some argue that fewer African American farmers, a more mechanized agriculture, and negative perceptions that equate agriculture with slavery are the major reasons for the decline. Others, however, suggest that once African American vocational agriculture teachers retired or otherwise left the profession, white teachers who replaced them did not aggressively encourage African Americans and other diverse populations to pursue careers in agriculture.

In addition, negative perceptions and stereotypes that various culturally diverse groups hold influence their decision not to enroll in vocational education courses. For example, Larke and Barr (1987) note that participation in agriculture is hampered in some cultures by stereotypes associated with being a farm laborer or field hand. "Bitter memories of poverty, slavery, and low socioeconomic status currently cloud many minority people's perceptions of agriculture as a profession" (p. 6). Hispanics have for generations provided the bulk of the farm labor in California and many states in the Southwest; thus, some Hispanic youth tend to have similar negative perceptions (Reed and Flores 1987). These perceptions exist even though fewer than 2 percent of modern agriculturally related occupations are linked directly to on-farm activities (Larke

and Barr 1987). Positive role models are needed to reverse such negative stereotypes.

Although some diverse groups and many other Americans tend to have negative perceptions about vocational education, numerous reports and many authors project that the U.S. labor force will continually become more diverse as various ethnic groups and increasing numbers of women become employed. According to Johnston and Packer (1987), five-sixths of the net additions to the work force between 1985 and 2000 will be women, non-whites, and various immigrants.

Occupational restructuring and an increasingly global society also point to a need for more vocational education. For example, in endorsing the need for additional apprenticeship training, Pennsylvania Governor Robert P. Casey notes that during the next decade, only 25 percent of the jobs in his state will require a college degree yet more than 50 percent of Pennsylvania's high school graduates are pursuing four-year college degrees (Watson 1992). As Pennsylvania expands its apprenticeship training programs, the model used in Germany, which had 1.7 million apprentices in 1989 compared to 263,000 in the United States, is being followed.

From a philosophical perspective, Locke and Parker (1991) suggest that current definitions and practices related to career development are perhaps not relevant for diverse populations. They suggest that such definitions and practices have been predicated upon the values and experiences of a white male, middle-class society. Given their perspective and that of Sue (1981), an inclusive philosophy that extends beyond a Eurocentric basis is needed to enhance the participation of diverse groups in vocational education. Such a philosophy must embrace notions that "different" is not a synonym for

"inferior." Ethnic, racial, cultural, religious, and gender differences are to be encouraged and expressed in lieu of assimilation and homogeneity.

### Summary

For the United States to achieve the richness that can be gleaned through an increasingly diverse society, attitudinal as

well as philosophical changes must occur before programming efforts are implemented. Vocational educators must first better recognize and then appreciate the merits of a diverse society. Second, effective, contemporary instructional programs must be designed and implemented that convey an inclusive rather than an exclusive philosophy relative to an increasingly diverse population.

## THE NEED FOR DIVERSITY

A number of societal changes and issues are prompting the need for additional programs and activities that will result in a more diverse vocational education. From a human resource perspective, diversity is needed in terms of the students being served, secondary and postsecondary teachers who join the profession, and university faculty who prepare future generations of teachers and conduct the research that leads to new knowledge which improves society and results in an enhanced standard of living. This section examines the need for diversity by focusing on four areas: (1) contemporary issues, (2) new and emerging audiences, (3) technological advancements, and (4) emerging employment needs. At the end of the section, selected barriers that inhibit diversity in vocational education are presented.

### Contemporary Issues

A number of forces, factors, and issues have influenced and are influencing the extent to which vocational education can expand its clientele base and serve a broader spectrum of society. Four topics are examined in this section:

- Political dimensions
- Educational reforms
- Societal changes
- International awareness

### Political Dimensions

Since the 1960s, federal legislation has attempted to broaden the clientele served by and the curriculum of vocational education. The Vocational Education Act of 1963 (P.L. 88-210) expanded the scope of vocational education to include more occupational fields, levels, and institutions as well as different clientele and more research. The Vocational Education Amendments of 1968 (P.L. 90-576) changed the definition of vocational education to include new and emerging occupations, guidance, counseling, and junior high school programs. After the passage of these two pieces of legislation, vocational education enrollments increased between 1963 and 1984 because of an expanding high school population, federal and state funding, and the admission of women and ethnically diverse groups into nontraditional programs areas.

The trend toward serving a broader spectrum of society continued with the Carl D. Perkins Vocational Education Act of 1984 (P.L. 98-524), which provided funding for a 5-year period to focus more extensively on improving vocational programs and better serving special populations. The law was reauthorized in 1990 as the Carl D. Perkins Vocational and Applied Technology Education Act and it provided the largest funding package in the history of vocational education. The act authorizes up to \$1.6 billion per year until 1995. Most of the funding is allocated for tech-prep programs and to educate disadvantaged youth and adults ("1917-1992" 1992).

## Educational Reforms

The impetus for many of the reforms that came to U.S. public education and vocational education during the 1980s can be traced to *A Nation at Risk: The Imperative for Educational Reform* (National Commission on Excellence in Education 1983). The effects that some of the reforms had on vocational education and its quest to diversify are summarized here.

Research conducted by the National Center for Research in Vocational Education (Strickland, Elson, and Frantz 1989) indicates that vocational enrollments declined in 32 states between 1984 and 1988. Within these states, program areas that experienced the most severe declines were business education, agricultural education, and trade and industrial education. Gray (1991) indicates that, "if enrollments are any indication, high school vocational education faces an uncertain future. While the National Assessment of Vocational Education (NAVE) found much broader student participation than most observers anticipated, the numbers peaked in 1984. Enrollments in vocational education are now suffering widespread decline" (p. 437). According to Wirt, Meyer, and Muraskin (1988), some educators attempted to keep their high schools open during the 1980s by discouraging students from enrolling in vocational programs and courses. Secondary vocational enrollments were also affected during the 1980s when 45 states increased their high school graduation requirements (Strickland, Elson, and Frantz 1989). Because of this move toward more stringent requirements, Wirt, Meyer, and Muraskin (1989) found that the adoption of increased graduation requirements caused fewer students, including individuals from diverse backgrounds, to take vocational credits.

The emphasis on educational reform included a renewed focus on earning a

college degree. For example, Kotrlik and Harrison (1989) found that 80 percent of parents wanted their children to attend college yet only 13 percent of the parents had attained a postsecondary education. In addition, college enrollments increased dramatically in the early 1980s. Over 50 percent of high school graduates were enrolling in college to pursue four-year degree programs (Gray 1990).

The National Commission on Secondary Vocational Education (1984) recognized vocational education for its implementation of problem solving, analytical skills, and the transfer of knowledge. "Vocational education is both a body of knowledge and an educational process, but the educational process has not received the degree of attention it deserves. Vocational education's potential to respond to diverse learning styles has been underutilized" (p. 4).

However, the National Commission on Excellence in Education (1983) provided a different perspective of vocational education. A major conclusion of this commission was that "the issue is quality. . . . Quality is a major issue in vocational education" (p. 23). In response, the National Commission on Secondary Vocational Education's report (*The Unfinished Agenda*) included a series of recommendations for reform in vocational education (Silberman, Herr, and McDaniels 1991). All of the recommendations were in the context of quality. The commission also identified several areas in need of improvement, especially teacher preparation and recruitment, curriculum, articulation, and leadership.

Research findings supported the need for improvement. A national study of secondary agricultural education commissioned by then Secretary of Agriculture John Block and Secretary of Education Terrel Bell resulted in the following major

findings (Committee on Agricultural Education in Secondary Schools 1988):

- Most students who enroll in secondary agricultural education are white males.
- The subject matter being taught focuses extensively on production agriculture.
- The quality of secondary programs ranges from poor to excellent.
- Supervised experiences for students range from none to excellent.
- The FFA awards system favors students from farms.
- College preparation that secondary teachers get ranges from none to excellent quality.

Berryman (1980) and Lotto (1982) examined basic skills achievement of vocational education students and found that these students are consistently less proficient than academic track students. In a related vein, the National Center for Education Statistics (White 1984) found that students with low cognitive test scores and individuals from families that have low socioeconomic status tended to earn more vocational course credits.

Gray (1991) assessed the status of vocational education at the secondary level and concluded that a general decline in secondary enrollments, increased graduation requirements, and students' growing preferences for pursuing higher education after high school seem to be the cause of the plunge in vocational education enrollments.

## Societal Changes

Vocational education has tended to attract students who—

- Come from a low socioeconomic family status
- Do not perform well in cognitive or academically oriented tasks
- Are not part of the regular high school extracurricular activities structure
- Rate the quality of school positively
- Are not alienated from school
- Are seeking a steady job, steady income, and a happy family life
- Are more satisfied with jobs and work (Creech et al. 1977)

However, a number of societal changes will have an impact on vocational education during the balance of this decade and into the next century. By the year 2000, the U.S. educational system will be serving students who are ethnically diverse, who have disabilities, and who will be poorer than before (Hodgkinson 1985). Family issues, employment, racial and ethnic diversification, and human resources will also play key roles as the public and private sectors attempt to provide educational opportunities that will prepare students for the technological future (Young and Householder 1992).

According to the *Vocational Education Journal* ("Minority Student Growth to '94-'95" 1992), a recent College Board study found that 34 percent of the nation's elementary and secondary students will be nonwhite and Hispanic by the 1994-95 school year. The number of Hispanic, African American, Asian American, and Native American students will increase to

13.7 million. Students from diverse backgrounds already comprise over 50 percent of the student population in Hawaii, New Mexico, and the District of Columbia.

These demographic changes mean that vocational education must reach out to new populations. For example, Burge (1990) suggests that new opportunities in the U.S. work force can provide more employment options for women and disadvantaged individuals. "Positions for both females and males in fields previously considered gender-specific may increase" (p. 1). However, Culver and Burge (1985) stress that vocational educators must examine their course structures and counseling procedures to determine whether barriers exist that may prevent students with low self-concepts from pursuing nontraditional careers. Smith (1991) described the nature of classroom interaction and the problem of gender disparity as it applies to secondary vocational instruction in Kentucky. "Female teachers were found to interact significantly more often with male students. No significant differences were found between student gender when male teachers interacted in the form of praise, acceptance, or remediation" (p. 49). In several respects, this finding tends to contradict much of the current literature that indicates that regardless of the teacher's gender or ethnic background, the teacher tends to give more praise and positive comments to white male students.

### International Awareness

Education is being challenged to prepare youth and adults to function in a global society (Warnat 1991). When the American Vocational Association's Board of Directors drafted a mission statement for the organization, they concluded that "the mission of the AVA is to provide leadership for the development, delivery, and promo-

tion of quality vocational technical education in a diverse and changing economic, social and technological world" (Clayton 1990, p. 8).

The Perkins Act of 1990 is designed to concentrate resources on improving educational programs that lead to academic and occupational skills needed to work in a technologically advanced society. The need for program improvement is demonstrated by a U.S. General Accounting Office study comparing work-bound youth in the United States and four competitor nations—England, Germany, Japan, and Sweden (Warnat 1991). Major findings were that (1) the competitor nations expect their students to do well whereas the United States expects its students to lag behind and (2) these nations invest more funds in education and training. Young adults in the competitor nations also have higher literacy rates than a comparable segment of the U.S. population.

One indicator of the need for global competitiveness is that the United States won only one gold medal (in 1983) in the International Youth Skills Olympics that involved over 400 youth from about 20 countries who competed in over 35 trade skill contests (Warnat 1991). Four means to enable vocational-technical education to build a world-class work force are as follows (ibid.):

1. Vocational education must better inform the U.S. public of its primary role in preparing the nation's work force.
2. Educational administrators and counselors should be better informed, more involved, and committed to education for all.
3. Secondary and postsecondary programs must collaborate more closely with the world of work.



4. Policymakers involved with education, employment, and the economy must coordinate efforts to strengthen the delivery of vocational-technical education.

The thrust of recent federal legislation, reform movements, population trends, and global competitiveness demonstrate the necessity for vocational education to reach out to new clientele.

### New and Emerging Audiences

In summarizing the data from the 1990 census, the U.S. Census Bureau used the following racial categories: American Indian (Eskimo or Aleut), Asian or Pacific Islander, black, white, and other. The bureau also collected data on individuals of Hispanic origin. Each of these diverse groups has unique characteristics, beliefs, and customs that are often misunderstood across the groups and even within a particular group. Descriptions of the major categories of diverse groups in the United States and their origins are provided (Bacon 1990):

- *Asian and Pacific Islander.* Of all the designations used to denote diverse groups in the United States, perhaps the least descriptive is Asian and Pacific Islander. Because of the extreme ethnic and cultural variations included in this designation, the term has limited utility beyond the context of geography, that is, to identify countries or territories in the Asian-Pacific region. The *Asian* part of the designation refers to countries and ancestry groups such as Chinese, Korean, Laotian, Indonesian, or Vietnamese; *Pacific Islander* includes Guamanian, Micronesian, Samoan, and other groups in the region.

- *African American.* Terms used to describe American blacks have evolved extensively during the last five generations. At the turn of the century, the term *colored* was commonly used to represent individuals of Afro-American heritage. This designation was transplanted by the term *Negro*, which was used extensively until the 1960s. During the 1970s and 1980s, *black* was the term of preference. *African American* or *Afro-American* is currently used by most blacks to describe themselves. However, some older African Americans prefer to continue describing themselves with designations used by prior generations, such as *colored* or *Negro*. Although such references may be acceptable within the African American community, the use of such terms by other groups is perceived to be insensitive at best and racist at worst. Bacon (1990) offers another dimension to the identity question as it relates to individuals who are not of African American ancestry. Many such individuals prefer to describe themselves according to their continent (African) or by their country, for example, Cameroonian, Ghanaian, Haitian, Jamaican, Nigerian, Somali.
- *Hispanic.* Persons of Spanish heritage, Spanish speaking, or Spanish surname often refer to themselves as Hispanics. The majority of Hispanics in the United States have links to Cuba, Mexico, and Puerto Rico; increasing numbers are from Central and South America. Bacon (1990) notes that the term *Hispanic* does not define a race of people—Hispanics can be of African, Caucasian, or Native American ancestry or a mixture thereof. In addition, Cubans and Puerto Ricans are typically of Spanish Caucasian and African heritage whereas Mexican Americans are often of Spanish Caucasian and

Indian ancestry. Although the term Hispanic is often used on the East Coast of the United States to refer primarily to Cuban and Puerto Rican communities, the terms Latino (Latin American origin) and Chicano are often preferred, especially among younger groups on the West Coast (Bacon 1990).

- *Native American Indian and Alaska Native.* Individuals who are recognized as such by the U.S. government or Indian/Native communities are identified as Native American Indians and Alaska Natives. Bacon (1990) indicates that there are more than 500 federally recognized American Indian tribes; thus, extreme diversity, not homogeneity, is found in their traditions, cultures, and languages. Because the term Native American refers to both Alaskans and Indians, Bacon recommends that American Indian or Native American Indian be used in addition to the term Alaska Native.

### Expanding Diverse Groups

Jennings and Moore (1988) state that the pressure for vocational education in African American and Latino communities will increase. Educators, civic leaders, and parents "will ask more and harder questions regarding decision-making, allocation and utilization of resources, and the quality and profile of the teaching profession in vocational education" (p. 53).

Vocational education can also help Asian Americans develop what they may already know into marketable skills. This group should be targeted for such instruction because, by the year 2000, the Asian American population will reach 10 million (Gordon and Friedenber 1988).

Jennings (1991) notes that changing demography is the first major challenge facing vocational education. "Taking advantage of economic opportunities could produce significant levels of socio-economic advancement for that sector of the Black community that has experienced poverty or near-poverty status" (p. 21). From a historical perspective, African Americans have a long tradition of participation in vocational education. Many slaves were involved in apprenticeship programs and in vocational and industrial training after the Civil War. "Today, Blacks face a crossroads and an uncertain future regarding their participation in vocational education" (ibid., p. 20).

From an instructional perspective, there is a need for more teachers, counselors, administrators, and teacher educators from diverse backgrounds to educate an increasingly diverse student population. However, fewer than 5 percent of all U.S. teachers will be from these groups by the year 2000 (Martinez 1991). African Americans comprise 7 percent of the faculty at secondary schools, 5 percent at postsecondary institutions, and 6 percent at colleges and universities. Hispanics constitute 3 percent of teachers in secondary schools, fewer than 3 percent at the postsecondary level, and fewer than 1 percent at colleges and universities (ibid.). Extensive recruitment efforts must be implemented to transform the current situation so diverse groups are adequately informed about careers in vocational education. Martinez (1991) proposes to increase their level of participation by developing candidate pools of talented students, making personal contacts, promoting vocational education in schools, and recruiting from postsecondary institutions where these students attend.

According to Young (1991), the African American urban community is in disarray because of poverty, unemployment, crime,

substance abuse, parental neglect, teenage pregnancy, illiteracy, and dropout rates. "Education can correct the problems that debilitate the Black American community . . . by increasing Blacks' participation in high-skill, high-tech vocational programs—without decreasing participation in academic programs" (p. 28). Young identified three goals for improving the participation of African Americans in vocational education: (1) eliminate negative attitudes toward vocational education held by many African American parents and community leaders, (2) introduce technology education into elementary schools, and (3) link vocational programs with community opportunities.

### Women

By the year 2000, 80 percent of women between the ages of 25 and 54 will enter the work force (Van Fossen and Beck 1991). Women currently comprise 45 percent of the work force, but over 75 percent are employed in traditional, female-dominated jobs—clerical, sales, service, and factory jobs. There is also a significant wage differential between female-dominated and male-dominated occupations (ibid.). Barriers that prevent women from entering nontraditional training areas are complex. Social and cultural barriers tend to be the most ingrained and form the basis for stereotypes about the types of work that men and women are expected to perform. Educators should provide career exploration activities at the beginning and end of the school year, organize support groups and services, provide assertiveness training and physical fitness for female students, and develop scholarship, mentoring, and awards programs for non-traditional students (Van Fossen and Beck 1991).

Murphy (1990) found that a majority of women who participated in a University of

Delaware study believe "that it is still more difficult for a woman than a man to succeed in vocational education and over half stated that they had been treated differently than men in similar positions" (p. 33). Women who participated in the study believe that females can provide the qualities needed to humanize vocational education settings because they are more caring and sensitive than men.

Burge (1990) cites "substantial evidence to suggest the social utility of sex equity in our society" (p. 9). She also notes that women and men can work effectively in occupations not dictated by traditional gender positions.

### Economically Disadvantaged

According to Hobbs (1989), "remaining competitive means eradicating poverty, which means boosting purchasing power, which means expansion of vocational-technical education, particularly for minorities and women" (p. 29). Vocational education will change since federal and state governments and local communities believe that vocational education is a way to address the economics of poverty (ibid.). "Blacks and Hispanics, especially, need new skills since they are overrepresented in American industries that are losing jobs and underrepresented in the most rapidly growing occupations" (p. 30). The role of vocational-technical education must change because data show that "we are not now keeping the poor from getting still poorer" (ibid.).

*The Forgotten Half* (William T. Grant Foundation 1988) indicates that the earnings of young Americans are decreasing because fewer youth can find work or wages that are adequate to maintain today's standard of living. The mean income for males, ages 20 to 24, declined almost 28 percent between 1973 and 1986.

Nationwide, more than one-third of homeless people are families with children. In addition, 59 percent of the children born in 1983 will live with only 1 parent before reaching age 18. The divorce rate and increasing number of out-of-wedlock births have added to the number of single-parent families (Kister 1989).

### Limited English Proficiency

Wentling (1985) describes the procedures and approaches used in identifying, assessing, and placing students with limited English proficiency (LEP) in vocational education programs in Illinois. She suggests that "special efforts should be made by vocational educators and other staff to work more closely with counselors in identification, assessment, and placement of LEP students" (p. 41). In Wentling's study, guidance counselors were found to be the primary individuals involved in establishing the criteria used in identifying LEP students and in assessing LEP students who are enrolled in vocational programs. Most Illinois vocational plans did not discuss criteria for identifying LEP students or the assessment instruments used for LEP vocational students.

### Older Workers

Intergenerational programs that result in extensive interaction between older and younger Americans are increasing in popularity (Angelis 1990). Older volunteers can enliven classrooms by serving as mentors, tutors, and guest lecturers. Angelis advocates that successful intergenerational programs be developed by conducting needs assessments, defining positions, recruiting and screening volunteers, and providing the volunteers with orientation, training, recognition, and evaluation. From a diversity perspective, many volunteers can be recruited from such groups as

retired teachers, professors, business professionals, and other workers.

### Technological Advancements

Hager (1990) argues against the dichotomy between vocational education and general education. He suggests that technological changes in the workplace have made job-specific training obsolete and that vocational education is more effective when taught in an integrated fashion. Breuder (1988) calls for improved linkages between vocational educational institutions and business and industry. Technology transfer and training are the most critical challenge to vocational education and U.S. productivity.

Van Huss (1989) notes that small businesses, which account for the largest growth in jobs, tend to rely upon vocational education to train the future work force. Therefore, vocational education must respond to key industry needs. For example, vocational business education should adapt to business technology because (1) microcomputer power and business use of microcomputers are increasing rapidly, (2) desktop networks will lead the growth in the computer industry in the 1990s, and (3) the office is being redefined as a primary information center.

Stafford (1989) states that "computers have changed the roles of both the teachers and students" (p. 31). She notes that computers will be used effectively only when the teacher has access to equipment and training and an opportunity to use the computer as a productivity tool. From a diversity perspective, all students must be exposed to the latest technologies that they can expect to encounter when seeking employment. Although such exposure will be a difficult challenge for poor school districts that enroll large numbers of diverse students, innovative partner-

ships with business and industry must be developed as a means of meeting this challenge.

### Emerging Employment Needs

Youth from diverse backgrounds are projected to constitute 20 percent of the U.S. population under the age of 17 by the year 2000 and 23 percent of this age group by 2020 (Ozawa 1986). From an educational and employment perspective, these youth have historically had minimal work experience and more poverty and school failure than other youth. Their level of employment has tended to be significantly influenced by a lack of education and training, structural changes in the urban labor market, few positive role models who are employed, and a lack of transportation to new job markets. Combinations of these factors often mean that these youth, especially African American males, are disproportionately involved with the juvenile justice system (Ozawa 1986).

Auspos and Price (1987) report that JOBSTART, a federally funded special demonstration project which targets low-income high school dropouts, is one of the

most comprehensive and well-designed plans to increase the employability of young African American males who have failed in traditional educational systems. Programs are conducted through adult vocational schools, Job Corps Centers, community colleges, and a host of community organizations. Such efforts must be encouraged because unemployment of young African American men tends to be positively correlated with unwed fatherhood (Johnson and Sum 1987). Successful programs must link information on family planning and sexuality with information on job counseling, recreation, self-esteem building, and health (Children's Defense Fund 1986).

### Barriers to Diversity

The case for diversity in vocational education is demonstrated by contemporary forces and issues, the emerging audiences that vocational education must try to reach, technological changes in the workplace, and the employment needs of diverse groups. Figure 1 lists eight barriers that must be addressed before vocational educators and other professionals can realize the advantages and benefits of a diverse society (Bacon 1990).

- The negative effects of racism, learned behaviors emanating from ignorance and poor understanding and appreciation
- The negative consequences of racial myths and stereotypes
- Mythical notions that ethnically diverse groups "take care" of their own
- Having little or no exposure to or prior negative encounters with members of ethnically diverse groups
- The need for diversity not being understood or respected
- Not knowing the programmatic needs of an ethnically diverse community and how to meet such needs
- Lacking knowledge of programs and/or assuming that programs are not of interest to individuals from diverse backgrounds
- Individuals from diverse backgrounds not feeling welcome to participate or that they will be rejected if they do

Figure 1. Barriers to diversity in vocational education

## THE DIVERSE VOCATIONAL TEACHER

The issue of diversity is not effectively focused upon by many secondary and postsecondary teachers. "Some educators reject the color and race issue and maintain that they do not see color. The fact remains that those of us blessed with eyesight capable of determining color do see color. When an instructor claims not to see color, what is really being conveyed is the notion that ethnic/racial makeup does not affect the teacher's acceptance of each and every student in the program" (Reed and Flores 1987, p. 15). Although such a posture tends to be admired, Reed and Flores indicate that students recognize the ethnic composition of a classroom, do not want to be isolated, and resent being placed in what is perceived to be a threatening educational setting.

"As the student population in the schools begins to fit the population predictions, the clientele in each and every classroom will either reflect the change or result in an empty classroom" (ibid.). Data from the Population Reference Bureau indicate that California's population will shift by the year 2010 (ibid.). California, which is approximately 64 percent non-Hispanic white, 22 percent Hispanic, 7 percent Asian, and 7 percent black, is expected to have a "minority-majority" within 30 years. Given this scenario, vocational education programs of the future must be representative of the rapidly changing student population.

However, recruiting students from diverse backgrounds will present several unique challenges. Reed and Flores (1987) note that generations of Hispanics have pro-

vided the bulk of the farm labor in California and many states in the Southwest. In addition, many African Americans associate vocational education and agriculture with the indentured servitude that their ancestors endured. Consequently, because many students from diverse backgrounds are hesitant to enroll in vocational education courses, traditional recruitment approaches will perhaps not be effective. Thus, innovative approaches must be devised and incorporated by vocational educators who wish to recruit students from ethnically diverse backgrounds.

### Multicultural Understanding and Appreciation

Family issues, employment options, racial and ethnic diversification, and human resource imbalances have recently begun to receive extensive public attention. This attention will play a key role in both the public and private sectors as decision makers attempt to provide solutions, ideas, and opportunities for all Americans (Young and Householder 1992).

Today's quest for diversity is more widespread and of a programmatic nature; however, almost 20 years ago the American Association of Colleges for Teacher Education (1973) adopted the position that multicultural education recognizes the right of other cultures to exist. The position that this association adopted suggests that the concept of multicultural education "deals with morality, attitudes and values—underlying philosophy of teaching that guides the behavior of each

individual teacher" (Tiedt and Tiedt 1986, p. 2). In addition, multicultural education helps all students develop their potential for academic, social, and vocational success (Gollnick and Chinn 1986). Since multicultural education affects everyone as an individual, each person must develop his or her feelings of self-esteem and understand other people in the world (Baptiste 1979).

The need for diversity and multicultural education is apparent as some teachers harbor latent stereotypes and racial biases. For example, Guttman and Bar-Tal (1982) found that teachers who were presented information regarding only students' ethnic origin responded in a stereotypic manner. They also discovered that teachers perceive Asian Americans to have lower academic ability, less academic interest, less diligence, and worse home conditions than students of European origin.

Evans (1991) stresses that, in working with a diverse population of students, "your attitude towards culturally different students is the first issue you must address, because it will be reflected in your instruction" (p. 22).

### Learning Styles and Behaviors

Individual students are more complex than color, ethnicity, or national origin, and yet their learning must be based on a perspective of individual needs in relation to the majority. Shinn (1987) developed three clusters that can be used in meeting the educational needs of underserved groups: cognitive, physical, and social/emotional needs. "One group may have cognitive differences based on ability, aptitude, learning style, or experience. Physical differences based on age, gender, kinetics, hearing, or vision may serve as a basis for a second group. The social/

emotional minority group may include socioeconomic status, personality, behavioral, or cultural differences, and race" (p. 10). Consequently, Shinn believes that vocational educators cannot optimize learning if they prescribe and use a single instructional management strategy for all students.

Shinn indicates that valid, reliable, and appropriate evaluation procedures must be employed to diagnose accurately the cognitive, physical, social, and emotional differences that occur in all individuals regardless of race or ethnicity. He recommends a diversity of approaches and techniques that range from confidential interviews with students and parents to formal, standardized assessments such as achievement tests, inventories such as the Learning Style Identification Scale (Malcolm et al. 1981), the Armed Services Vocational Aptitude Battery (ASVAB) developed by the Department of Defense (1987), and the General Aptitude Test Battery (GATB) that is available from the state employment service. Shinn also recommends simple yet accurate reading tests such as the San Diego Quick Assessment Test (Tonjes and Zintz 1981), the Myers-Briggs Type Indicator (Briggs and Myers 1976), and techniques such as the socioeconomic matrix, which can be used for instructional planning and behavioral management (Hammill and Bartel 1979). Regardless of the assessment approaches that are used, the diagnostic process must occur before appropriate teaching strategies can be chosen and used to compensate for differences in all individuals (Shinn 1987).

To teach effectively a class that consists of a diversity of students who have multiple learning styles and various behavioral patterns, Lynch (1991) suggests that vocational education teachers must—

- integrate general education and work force skills;
- teach and motivate students through work-oriented manipulative skills, decision making, and problem solving;
- address the knowledge, ethos, and structure of the workplace;
- teach the social, cultural, family, and economic underpinnings of work; and
- demonstrate the use of technology.

### Instructional Methods

An array of instructional approaches must be used to teach students who bring various cultural backgrounds and experiences to U.S. classrooms. All such approaches must be used in a manner to avoid biases such as those identified by Simpson and Erickson (1983), who examined teachers' verbal and nonverbal behaviors in the natural classroom setting to assess differences based on the gender and race of the students and the race of the teacher. Eight white and eight African American first-grade teachers in an urban elementary school district participated in the study. They found that "white teachers directed more verbal praise and criticism and nonverbal praise toward males and more nonverbal criticism toward black males" (p. 183). Vocational educators must examine their teaching to detect and eliminate conscious and unconscious biases such as those identified by Simpson and Erickson.

Teachers should use strategies to make the curriculum and instruction multicultural (Gollnick and Chinn 1986). A positive multicultural teaching perspective is needed to teach students about various cultures and experiences regardless of whether individuals from diverse back-

grounds are present. By offering students a multicultural education, teachers are preparing them to work in an increasingly multicultural world.

Young and Householder (1992) propose that "we can no longer afford to teach all students the same knowledge and skills in the same way. Teachers must make an effort to know all their students and to build on their strengths and help them overcome their weaknesses . . . teachers need to expand their repertoire of methodologies beyond the usual approaches" (pp. 8-9).

### The Transition from School to Work

President-elect and Governor Bill Clinton of Arkansas (1991), a significant leader in educational reform, advocates "school-to-work" programs that blend vocational education and academic education in high school, provide students with meaningful work experience, and continue training after graduation. Such occupation-specific education in high school programs tends to lower the dropout rate and increase wages and employment when training-related jobs are obtained (Bishop 1989). Mertens (1986) analyzed the New Youth Cohort of the National Longitudinal Surveys of Labor Market Experience database to determine the retentive effects of vocational education for high-risk youth. Contrary to the findings of several studies, she concluded that vocational education participants do not have a greater chance of dropping out of high school than non-vocational students.

However, Bishop (1989) indicates that most vocational graduates lack such employment. He suggests that state funding of vocational programs should be based on a school's success at job placement.



The following job placement methods were used successfully by the cooperative education coordinator working with disadvantaged students at the Hartford Area Vocational Center in Vermont: (1) identifying potentially disadvantaged students, (2) screening cooperative education employees, (3) encouraging student decision making, and (4) fostering student placement interviews with the employer (Frasier 1981).

Hull and McCaslin (1987) found that the greatest commitment to student placement was in area vocational schools. However, although the teachers were committed to placing students in jobs related to their training, they indicated that teaching job search skills was more important than providing placement services.

Instructional Development and Evaluation Associates, Inc. (1982) conducted a 3-year study to identify significant factors that affect the job placement rates of students competing in the Home Economics Related Occupations (HERO) program. Key findings were as follows: (1) program assessment procedures should be used for program evaluation and enacted each year, (2) multiple resources should be used in curriculum development, (3) promotional activities should be targeted to guidance counselors, and (4) student follow-up should be used for program modification.

Denby (1991) asserts that vocational students want immediate, coordinated work experiences after finishing vocational training. He also notes that students want work and learning experiences that lead to careers with advancement potential.

Welch and Erwin (1986) suggest that for vocational programs to ease the school-to-work transition of inner-city disadvantaged youth, the process must begin at the intermediate or elementary levels. They also propose that labor laws be amended to allow inner-city youth to acquire job experience before leaving school. More role models should be identified and ties strengthened between schools and industry.

Greenan (1984) identified problems, needs, effectiveness, and interest in enhancing personnel development networking activities for teachers who work with students with disabilities. Ethnically diverse groups cited least restrictive environmental mainstreaming as a significant problem area related to the transition from school to work. Psychologists, counselors, researchers, vocational evaluators, and parents cited problems in inter-agency/organizational collaboration and transition services. Vocational teachers and teacher educators emphasized concerns for preservice and inservice programming and/or certification.

### Teaching Diverse Students

A number of approaches and strategies are needed by vocational educators to recruit, teach, and place increasing numbers of youth from diverse backgrounds. The strategies presented in figure 2 illustrate the vast array of options that are available to vocational educators.

- Expect, respect, and appreciate diversity.
- Have high standards and expectations for ethnically diverse students.
- Understand, value, and share non-European experiences.
- Use culturally appropriate language and teaching techniques.
- Avoid asking any student to speak for a whole race of people.
- Use positive role models from ethnically diverse communities.
- Be honest, fair, and consistent in dealing with ethnically diverse students.
- Seek "an" answer and not always "the" European answer.
- Use a variety of methods and techniques for ethnically diverse students.
- Use ethnically diverse leaders as resources for teaching and student recruitment.
- Develop strong teacher-parent relationships within ethnically diverse communities.
- Help end biases that impede the hiring and career advancement of ethnically diverse and female students, teachers, and administrators.

**Figure 2. Approaches to diversity in vocational education**

## DIVERSITY IN VOCATIONAL TEACHER EDUCATION

Although most projections forecast an increasing number of ethnically diverse students to be enrolled in U.S. public schools during the 1990s, the number of teachers from these populations is expected to decline to only 5 percent of all teachers (Greer and Husk 1989). The implications of such a decline are far reaching. For example, in addition to handling the usual responsibilities associated with being a teacher, ethnically diverse vocational teachers are perceived by students to be valuable role models (Bell, Powers, and Rogers 1987).

The decline in the number of ethnically diverse teachers can be attributed, in part, to expanded missions by many historically black colleges and universities that have traditionally prepared scores of vocational educators. As these institutions expanded their missions to include areas other than teacher education, many students, especially African Americans, chose majors in such fields as the sciences, engineering, and business. While this transformation was occurring in historically black institutions, the number of teachers graduated by the predominantly white 1862 land-grant universities remained constant. Several researchers have confirmed these trends. For example, during the period of 1975-1976 to 1981-1982, Trent (1984) found that the percentage of degrees awarded in education to African American females decreased from 31.7 percent to 19 percent and for African American males the percentage decreased from 14.5 percent to 10 percent. In addition, for the period of 1976 to 1985, the American Council on Education (1987) found a 50

percent decrease in the number of high school graduates who listed education as their major. Not surprising, African Americans comprised a significant proportion of the students who did not plan to become teachers. Further, Lyson (1983) indicates that from 1967 until 1977, the percentage of degrees granted in education by 1890 land-grant institutions declined by almost 19 percent whereas the percentage decreased by only 0.1 percent at the predominantly white 1862 land-grant universities.

Although the number of ethnically diverse teachers continues to decline, career opportunities tend to be expanding in view of salary increases and professional options that resulted after such reports as *A Nation at Risk* (National Commission on Excellence in Education 1983). "Teaching continues to be a very viable profession for minorities. Minority teachers contribute to the economic vitality of the communities in which they work and serve as role models for youth. They are very viable in the community and usually play an active role in educational leadership and cultural activities of the community" (Bell, Powers, and Rogers 1987, pp. 13-14).

### The Undergraduate Experience

A multicultural educational system will not be achieved simply because universities enroll significant numbers of ethnically diverse individuals such as Asian American, African American, Hispanic, and Native American students (Wilson

1992). Consequently, it is imperative that faculty help students move beyond their respective ethnic groups to learn about and share the cultural values of various ethnic groups. However, without faculty intervention, Wilson argues that students will not view each other as individuals but in terms of their ethnic identity. Also, contrary to what is happening on many university campuses, "the practice of establishing singular ethnic studies courses and programs tends to segregate rather than unify the student body. The cultural values of different ethnic groups should be woven into the fabric of the component elements of the curriculum and not isolated in special courses" (Wilson 1992, p. 169).

Further, from an instructional perspective, Anderson (1987) indicates that cultural values and socialization practices tend to influence the cognitive styles of college students. He says that white students tend to be influenced by Western values and African American students by non-Western values and cultures. Thus, although most African American college students have the academic ability, cultural differences often create academic difficulties for such students on predominantly white university campuses. Anderson advocates a five-phase model that has been used successfully in the sciences to educate diverse students:

- Develop cognitive and noncognitive profiles of students
- Institute preentry programs
- Encourage bonding between faculty and staff
- Foster ethnic identity
- Maintain high standards of excellence

### Teacher Recruitment

Issues related to the recruitment and retention of ethnically diverse teachers are

complex and poorly understood and articulated. Consequently, many programs created to diversify the teaching profession generate poor or mixed results. However, the following two examples illustrate how the problem is being successfully approached in two regions of the United States.

Teacher recruitment problems encountered by the Jefferson County Schools in Louisville, Kentucky, are typical of those faced by many large, urban school districts that enroll large percentages of African American students. When the Louisville city schools and the Jefferson County Schools merged in the 1970s, the percentages of African American students and African American teachers in the new system were almost identical (19 percent and 20 percent, respectively). However, about 10 years into the merger, the percentage of African American teachers had decreased to 16 percent and the percentage of African American students in the system had increased to 29 percent. The applicant pool as well as the pool of future applicants enrolled in teacher education programs were such that an innovative intervention strategy was needed. Hence, the *Minority Teacher Recruitment Project* (MTRP) was initiated in 1985 with a "Grow Your Own" philosophy and a goal of having the percentage of minority teachers in the system equal the percentage of minority students, about 30 percent (Greer and Husk 1989). Assistant Superintendent Joseph Atkins and William Husk, a professor of secondary education at the University of Louisville, conceived the MTRP. The project consists of the following three dimensions:

**Post High School Participant Program.** The focus of this effort is to identify high school graduates who are interested in becoming teachers and willing to become certified as teachers. The pool includes such individuals as—

- Teacher's aides,
- Nonprofessional employees of the school district,
- Substitute teachers,
- Persons enrolled in associate degree programs,
- Holders of expired teaching certificates, and
- Certificate holders who are not employed in their area of certification primarily because of teacher surpluses.

Since this phase of the project was instituted in 1985, 600 individuals inquired about the program and 115 were pursuing teacher certification courses in 1989. Thirty-nine new teachers were recruited and certified through the program.

**High School Teacher Mentor Program.** An effort initially patterned after the Future Teachers of America (FTA) concept was implemented in 1986 with chapters being established in the Jefferson County School District's 21 high schools. However, the FTA concept had to be modified extensively so the focus was more on teachers mentoring students who wanted to join the profession. The program was initially targeted to juniors and seniors but later changed to freshmen and sophomores primarily because of a finding that the 10th grade is the ideal time to interest youth, especially African American males, in teaching as a career (Greer 1989). As a result of this program, Greer and Husk (1989) indicate that 150 graduating seniors have since enrolled in colleges and are interested in a major or minor in education.

**Middle School Teaching Awareness Program.** The final phase of the project was started in 1989 with full implementation expected later in all of the district's middle schools. Two objectives of this phase are to (1) have teaching included when career exploration units are taught

and (2) highlight the consequences of having too few ethnically diverse teachers.

The second model program, *The Institute for the Recruitment of Teachers*, began in 1990 at the College of the Holy Cross in Andover, Massachusetts, to encourage students from diverse backgrounds to become high school or college teachers (Lieb 1992). The institute, which is targeted to college juniors, has an annual budget of \$300,000 that is supported through a consortium of 19 colleges and universities and by private foundations and individual donors. The hallmark of the yearlong institute is a 4-week summer session that consists of 6 hours of classes per day. Instructors for the institute include administrators, professors, and teaching assistants. Students who participate in the institute engage in scholarly debates and focus on societal issues that they say are not dealt with during their classes at their home institutions. One participant indicated that during his 4 years of college, he had been exposed to only two professors from ethnically diverse backgrounds and most of his readings focused on Western Europe and white males. To date, all 46 graduates of the program who have applied to graduate school have been accepted and received full-tuition grants from one of the 19 participating institutions.

### Inservice Education

Teacher inservice training is an area on which teacher educators and administrators must focus if they wish to enhance the capacity of secondary and postsecondary teachers to educate an increasingly diverse population of students. Innovative approaches must be used, especially with teachers whose undergraduate preparation did not feature an extensive focus on multicultural education and how to teach students with diverse backgrounds.

What qualities are needed by instructors in the diverse classroom? The Division of Occupational and Vocational Studies at The Pennsylvania State University (1978) found that successful teachers of disadvantaged students displayed more endurance, order, and deterrence than did unsuccessful teachers of the disadvantaged.

Kleinle (1988) identified inservice priorities that enable vocational teachers to teach effectively students who have special needs:

- Teacher attitudes
- The mainstreaming process
- Involvement in the Individualized Educational Plan
- Identification of special students
- Teachers' rights

One way to prepare instructors is the Designated Vocational Instruction Program, conducted by the Wisconsin Department of Public Instruction to improve the scope and quality of secondary vocational education for special needs students (Gilles and Krueger 1984). Teachers from 71 school districts participated in a 6-week graduate-level training course that focused on teaching vocational instructors how to assist students with disabilities in entering and participating in existing vocational programs. The first year of the program served 437 students and was rated as successful.

### Professional Organizations

The National Association for the Advancement of Black Americans in Vocational Education (NAABAVE) finds that African Americans and other ethnically diverse groups are underrepresented in vocational education (Young 1989). Also, NAABAVE indicates that the proportion of individuals from diverse backgrounds in vocational teaching and administration is

generally small and limited. NAABAVE conducts various professional activities to enhance the participation of diverse groups in vocational education. Membership in NAABAVE is open to all individuals and groups.

Professional associations and societies such as NAABAVE are in unique positions to influence the quest for diversity in vocational teacher education. Numerous professional organizations are responding with committees, task forces, and other groups that focus on diversity issues. In addition, several professional organizations such as the American Home Economics Association offer a few academically talented students from diverse backgrounds monetary incentives in the form of fellowships. Collectively, the vocational education professional associations must become more proactive in promoting diversity. The following example illustrates the state of the art relative to diversity in one area of vocational education (agricultural teacher education).

The Involving Diverse Populations in Professional Development Committee of the American Association for Agricultural Education (AAAE), a professional organization comprised primarily of white males, was formed in 1991. This committee surveyed departments of agricultural education in 36 universities to assess the extent of involvement with the recruitment, retention, and placement of ethnically diverse and women students. Based on the findings of the study, four conclusions were generated (Bowen et al. 1991):

- Nothing special or different has been done by most departments to recruit and retain students from diverse populations.
- Departments that emphasize recruitment and retention tend to be located in states with large numbers of diverse

populations and use traditional print media and techniques.

- Most departments did not perceive minority recruitment, retention, and support after graduation to be a problem or concern.
- There is a need to increase the awareness of and knowledge about diverse populations both in the United States and other countries.

Based on its findings and the finding by the Committee on Agricultural Education in Secondary Schools (1988) that most students who enroll in secondary agricultural education are white males, the committee recommended that the agricultural education profession institute approaches to make the profession aware of and appreciate the need for diversity.

The committee is developing a monograph and will conduct sessions during the annual AAAE meetings to focus more attention on diversity issues.

### Diversity Approaches

A number of strategies and approaches are available to help teacher educators and administrators enhance the diversity of vocational teacher education. Such approaches are crucial if higher numbers of ethnically diverse teachers and university faculty are to be available to instruct the increasing numbers of ethnically diverse students who are enrolling in U.S. public schools. Approaches listed in figure 3 are provided to illustrate the vast array of options that are available.

- Use campus resources, for example, minority and affirmative action offices.
- Build functional partnerships in ethnically diverse communities.
- Conduct summer camps for talented students and teachers.
- Adopt schools with large numbers of diverse individuals.
- Promote teacher and university faculty exchanges among ethnically diverse populations.
- Use schools with large numbers of diverse populations as student/teacher experience centers.
- Recruit high quality teachers to become university faculty.
- Develop, recruit, and retain capable ethnically diverse faculty.
- Institute faculty-student exchanges with historically black colleges and institutions with large numbers of ethnically diverse students.
- Institute faculty exchanges with universities in other nations.
- Use distance education technologies to bring diverse perspectives and diverse guest lecturers to courses.
- Work closely with local and state administrators to place graduates and eliminate hiring biases.
- Develop and implement diversity goals via strategic planning.
- Encourage professional associations to conduct activities and programs to enlighten members, increasing appreciation for diversity.
- Incorporate rewards systems to recognize and support faculty who conduct programs and activities to enhance diversity.

Figure 3. Approaches to diversifying vocational teacher education

## DIVERSE VOCATIONAL EDUCATION PROGRAMS

A number of changes can be expected in the types of vocational education programs that will be needed during the balance of this decade given the projected demographic characteristics of the U.S. population. For example, several authors cited elsewhere in this volume indicate that one area of vocational education (agriculture) tends to attract primarily white male students, the subject matter tends to focus primarily on how to produce food and fiber, and yet most of the employment opportunities are in agricultural businesses and industries. In addition, many diverse groups equate vocational education and production agriculture with slavery, sweat shops, migrant labor, low wages, and other negative dimensions of society. Given this situation, significant programmatic and perceptual changes must be effected to meet the educational needs of an increasingly diverse population. All areas of vocational education must confront these problems and issues.

The focus of this section is on innovative instructional programs needed to educate an expanding diverse population. Topics are addressed relative to (1) contemporary programmatic needs, (2) instructional methods and procedures, (3) life skills development, (4) employment needs, and (5) program planning considerations.

### Contemporary Programmatic Needs

Bloomfield (1989) notes that many youth, especially Hispanics and African Americans, tend to receive poor preparation for

employment or higher education. He indicates that not only do few ethnically diverse students take tests such as the Scholastic Aptitude Test, which many colleges use as part of the admission process, but the few who do (9 percent of African American and 3 percent of Hispanic high school seniors in 1985) tend to perform at lower levels than white students. He advocates the development of innovative programs that feature partnerships which involve high schools, colleges, and the business community. Such efforts are needed to counteract latent teacher biases and support systems that tend to favor white male students at the expense of diverse and female students.

Weber (1988) indicates that "every year 700,000 to 1 million youth walk away from school. A growing body of research suggests that the dropout problem can be reduced through improved educational programming, and that vocational education has a role to play in such efforts" (p. 36). The innovative programs detailed here illustrate the breadth of options for vocational education to diversify by expanding into new and emerging areas.

One way to introduce urban youth to vocational education is through urban educational programs that focus on contemporary subject matter such as horticulture (Gordon 1987). One such program, a vocational horticulture project at Central Diesel School of Brooklyn, New York, was implemented in 1987 to improve job readiness while increasing the level of participation by diverse individuals in careers in horticulture. The



program at the Gateway Environmental Study Center includes instruction in six areas:

- Interior landscaping
- Retailing in horticultural businesses
- Grounds and landscape maintenance
- Commercial garden centers, greenhouses, and nurseries
- Community gardening
- Wildlife conservation

The program features a partnership with the National Park Service and the Cornell University Cooperative Extension Service. Should the program be successful, it will be expanded to include students from the city's other four boroughs (the Bronx, Queens, Manhattan, and Staten Island).

By the year 2030, 21.8 percent of the U.S. population will be 65 or older (Harper 1990). "Vocational education, it seems, is in the unique position of influencing the quality of education that older people, their caregivers, and the corporate sector will receive" (p. 14). Jobs involving the aging population will expand, change shape, and spawn new careers that will require vocational preparation to be concentrated in five areas (ibid.):

- Informal caregivers
- Homemakers/home health aides
- Occupational therapists
- Nurses and nurses aides
- Nursing home personnel

Angelis (1990) proposes that vocational education can benefit by becoming

involved in these emerging areas and by participating in intergenerational programs that allow older people to share a lifetime of skills and knowledge with younger students. Vocational teachers must assume the responsibility for identifying older ethnically diverse individuals who are willing to share their vast experiences and skills with students.

Welfare clients comprise another underserved audience (Ganzglass and McCart 1990). Vocational education is an ideal vehicle for moving welfare recipients into the world of work and self-sufficiency. Ganzglass and McCart (1990) urge vocational educators to make learning relevant, set clear expectations, adjust to different learning styles, teach in manageable pieces, emphasize apprenticeship and cooperative education, and establish a peer support network when teaching welfare recipients.

*Career Beginnings*, an innovative program that targets students who are in the middle of the academic spectrum, was started in 1985 to focus on disadvantaged youth who have the potential to complete a training program, secure an entry-level position, or attend college (Bloomfield 1989). "*Career Beginnings* brings together high schools, business, and local colleges in working partnerships, which provide college and career preparation, summer and school-year work experience, special academic tutoring, counseling and support services, and the individual guidance and encouragement of volunteer adult mentors from the business and professional communities" (p. 17). The program is headquartered in the Heller Graduate School of Business at Brandeis University in Waltham, Massachusetts, and sponsored nationally by the Commonwealth Fund, the MacArthur Foundation, and the Gannett Foundation, Inc. According to Bloomfield, 24 colleges were chosen to

participate in the national program, which has the following major dimensions:

- The case management approach to track and support students
- Mentors and community partnerships as key human resources
- Encouragement of summer work and learning
- School-year activities to develop continuity in the program
- A life after high school orientation so students focus on career development

Students chosen for the program are mostly juniors, attend school regularly, have average academic achievement, and have demonstrated motivation and commitment. More than half of the participants must meet the federal definition of poverty and 80 percent must be first-generation college students. "Halfway through their junior year, students are matched with volunteer mentors from corporations, local businesses, and professionals who meet with them, one-on-one, at least once a month for the next 18 to 25 months" (Bloomfield 1989, p. 22). Monthly workshops and classes are taught by instructors from the participating colleges, high schools, and the community. *Career Beginnings* counselors keep close tabs on the students. More than 7,000 students have participated in the program since 1986; 90 percent come from families below the poverty level and half from single-parent homes. Two-thirds are females and a majority are African Americans but the composition varies according to the location of the participating college.

According to Bloomfield (1989), the following conclusions resulted from the program:

- Colleges can design, implement, and manage innovative programs.
- The middle 60 percent of the high school population gets much needed attention.
- Mentoring and community-oriented partnerships are essential.
- Project staff must be competent and committed to serving this segment of students.

### **Instructional Methods and Procedures**

In order to structure classrooms for student success, vocational educators must concentrate on five environmental factors that are common to every classroom: (1) the teacher's style, (2) the curriculum, (3) students' learning styles, (4) the organization and management of the classroom, and (5) evaluation and assessment of student learning (Eschenmann 1988).

Methods and approaches that vocational teachers can use to keep students motivated and on task include student-teacher demonstrations, role playing, problem-solving simulations, gaming strategies, overheads and other audiovisual materials, brainstorming, panel discussions, and resource speakers (Lindsay 1988). Yorke (1988) recommends that vocational teachers use norm setting, a type of student-teacher planning that develops mutually acceptable rules for specific class activities.

Students, especially diverse youth who are not familiar with the subject matter, must understand what the curriculum entails and perceive the curriculum to present a challenge. Vocational teachers must use various in-school and out-of-school activities that coordinate with and complement

the goals of the curriculum. The instructor must also vary the daily activities to prevent boredom (Eschenmann 1988).

"The demands of the 21st century's knowledge-based economy perhaps pose the greatest challenge to vocational education" (Talley 1989, p. 28). The 21st-century workplace is being described as a "fluid environment" wherein workers exercise higher-order thinking skills. Vocational education must provide such skills as well as the capacity to operate highly advanced technical equipment. Restructuring efforts to integrate academic and vocational instruction and to implement tech-prep programs should enhance the teaching of the higher-order skills needed to compete in the global workplace of the 1990s and beyond.

Interactive multimedia give the vocational teacher powerful tools to create rich learning environments (Talley 1989). Subject matter can be illustrated through visual, audio, text, and other combinations of media. Vast amounts of information can be explored and manipulated through interactive media, providing the student with successful comprehension and retention.

"Teachers who appreciate individual differences among students have an innovative new teaching tool available: Interactive videodisk technology, or IVD" (DeZonia 1990, p. 36). Interactive video can help vocational students overcome difficult learning problems, open doors to opportunities in high technology, and address the growing complexity of "work-site" instruction (ibid.). For example, because students had a statewide failure rate of almost 50 percent in physical science, the Texas Learning Technology Group developed a video curriculum to assist students with this subject matter. In a field test, all students with different learning styles learned more from the

videodisks than they did in the conventional classroom (DeZonia 1990).

### Life Skills Development

A number of intervention programs are needed to help African American youth develop self-sufficiency and enhance self-esteem, which indirectly will contribute to lower rates of delinquency and substance abuse (Polsky 1986). The focus of such programs should include counseling, employment skills, remedial education, life skills training, and outreach efforts to reduce gang violence and improve conflict resolution.

Early adolescents, including diverse youth, who participate in clubs or organizations such as 4-H tend to develop higher levels of competency, coping, and contributory life skills than nonparticipants (Miller and Bowen forthcoming). The extent of participation, whether in school-based or non-school clubs and organizations, positively affects the development of life skills. However, students' level of self-esteem is an even better indicator of their development of life skills. To an extent, students can enhance their self-esteem by participating in various clubs and organizations.

### Employment Needs

Programs and educational projects detailed here illustrate the diversity of employment training needs that can be and are being filled by vocational education and related educational programs.

A special training program for Native Alaskan employees at a mine in Northwest Alaska is sponsored by a Native-owned firm and funded by the U.S. Department of Education (Ginsburg 1991). Since 1990, 108 employees have enrolled in the program, which is designed to help

workers advance faster than they would on their own. The program is augmented by on-the-job evaluation and supervision to help the workers learn faster.

Cities such as New York have instituted special vocational education programs to meet the unique needs of adult immigrants. The Refugee Vocational Program at the Chinatown Manpower Project in New York City principally trains Vietnamese and Cambodian refugees for clerical jobs (Gordon and FriedenberG 1988).

Many civic and community leaders in Pittsburgh credit vocational education for helping revitalize the city's urban core as well as its economy (Monaco and Parr 1988). During the 1980s, the city lost over 100,000 jobs in industry, manufacturing, and related businesses. As a result, the city had to diversify by bringing in many new small businesses and high technology research-oriented firms. However, the city still faces tremendous challenges such as a 27 percent dropout rate, teenage pregnancies, and the unemployment of African American males. In such a disadvantaged culture, vocational education continues to provide Pittsburgh's students with the job skills, work habits, and motivation to achieve success. Instructional programs focus on (1) vocational and technical courses, (2) the Occupational and Academic Skills for the Employment of Students (OASES), (3) the Select Employment Trainee Program (SET), (4) a high-tech magnet school, and (5) a school within a school program.

### Program Planning Considerations

Future program planning efforts in vocational education must shatter existing paradigms and more effectively integrate members of diverse communities into the planning process. To accomplish this objective, program planners must become

more informed about diverse communities and their unique attributes and needs. For example, ethnically oriented newspapers, radio and television stations, cable outlets such as the Black Entertainment Television network, cultural events and activities, community centers, small businesses, religious groups, and so forth tend to receive limited *positive* attention from the mainstream mass media and society at large. Consequently, many vocational educators are vaguely familiar with or unaware that such institutions exist. Such a low level of familiarity tends to result in misguided, stereotypic assumptions that few positive institutions exist in diverse communities.

On the other hand, from a survival perspective, ethnically diverse vocational educators who teach in integrated schools or those that enroll primarily students of European ancestry continuously deal with the problems of cross-cultural understanding, appreciation, and expression. To be effective educators, such teachers must frequently deal with issues and topics that appeal primarily to white Americans.

However, many white educators have not had to deal with diversity issues and topics. But, as the number of diverse students in the United States continues to increase, white teachers, administrators, university faculty, and others who subscribe to the "melting pot" theory will be faced with two distinct options: (1) not recognize that diversity exists or simply ignore it or (2) simply tolerate the differences inherent in a diverse society. One hopes that neither of these options will be chosen and these individuals will instead celebrate diversity and the positive intellectual growth and expansion that can occur. Prudence dictates that individuals who wish to educate students from diverse backgrounds effectively will choose the latter option and become more cross-cultural in their teaching. The following

proposed for individuals who wish to achieve this instructional goal:

1. Understand and appreciate the need for diversity
2. Become aware of the demographic composition of the school community
3. Recognize and develop an appreciation for all cultures and the ethnic diversity found in the school community

4. Integrate cross-cultural recruitment, retention, instructional, counseling, and placement approaches

Figure 4 lists various components of multicultural communities and desired interaction patterns needed among such communities, vocational education, and employers.

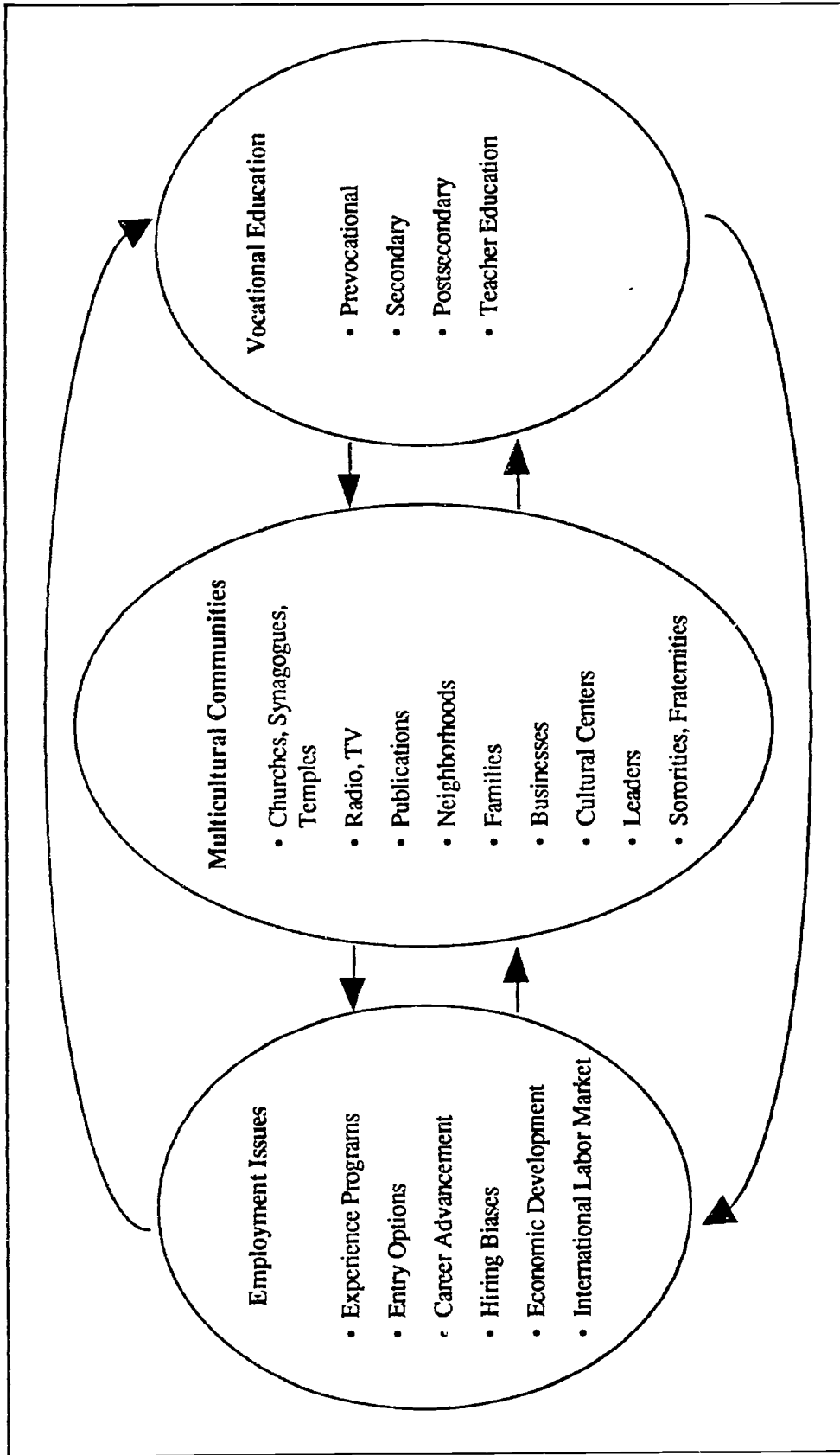


Figure 4. Understanding multicultural communities to create partnerships and collaborations with vocational education and employers

## CONCLUDING THOUGHTS

Enlightened self-interest is perhaps the primary motivation behind many of the United States' current attempts to cope with and capitalize on its diversity. As noted elsewhere in this document, most demographic trends point to a more ethnically diverse U.S. population and more women being employed full time. Given these trends and a desire to remain competitive on a global basis, prudence dictates that the nation's interests will be best served if it seeks to educate and use all of its vast yet diverse human resources. Most in the United States concur with this goal and are committed to using various approaches to achieve the desired competitiveness.

From a philosophical perspective, most of today's successful approaches to diversity subscribe to the fruit salad mentality wherein cultural, racial, ethnic, and gender differences are encouraged, enhanced, and promoted. Unlike melting pot approaches that strive for homogeneity through assimilation, fruit salad approaches are characterized by understanding, appreciation, and celebration of differences rather than the suppression of diversity. Fruit salad approaches also incorporate perspectives that extend beyond the confines of Western Europe and the philosophies of middle-class white males.

One example of the United States' attempt to embrace diversity through fruit salad approaches can be found in the political arena. The 1992 presidential and congressional elections underscore how society is becoming more inclusive as various underrepresented groups are being

incorporated into the mainstream of the nation's political process. These elections brought a number of "firsts" regarding the expanded national-level political involvement of African Americans, Asian Americans, Hispanics, Native Americans, and women. However, this trend toward enhanced diversity is not limited to the national level. In countless local, district, and state governments, increasing numbers of diverse individuals are assuming various elected and appointed leadership positions.

The impact of the changes that are occurring in the political arena will become more apparent as new educational policies, procedures, and programs are formulated with a strong philosophy of and commitment to diversity. In addition, because vocational education is a member of the larger educational community, vocational educators and their instruction will be influenced significantly by this movement toward a more inclusive philosophy of and approach to diversity.

From a pragmatic perspective, most vocational educators will perhaps agree with Woodring (1983) that it is more difficult to educate students who bring diversity to U.S. classrooms than it is to teach students who have a single culture and ethnic heritage. However, given the projected demographic trends, a stronger national commitment to the merits of diversity, and a more enlightened and receptive legislative branch of government, the option of teaching vocational education in monocultural settings and almost exclusively from European perspectives will increasingly

not be available. Consequently, the difficulties associated with educating a diverse society through vocational education must be identified and appropriate remediation strategies instituted.

The quest for enhanced diversity in vocational education must begin with an enlightened appreciation that results from attitudinal shifts and stronger philosophical commitments to the richness that diversity can spawn. Once the prerequisite attitudinal shifts and commitment are in place, programmatic implementation processes must be initiated that have long-term, dynamic, and sustained characteristics.

The ideals of diversity cannot be realized with shortsighted, narrowly focused approaches. Consequently, once vocational educators become more committed to providing high quality, contemporary vocational education for diverse audiences, considerable patience, perseverance, and understanding will be needed. History shows that quests for ethnic pride and expression are potentially explosive and divisive (Woodring 1983). For example, "Irish-Americans show their devotion to 'the old country' by contributing funds to the IRA and by celebrating St. Patrick's Day" (p. 97). Similar concerns emanate from other groups that Woodring labels *hyphenated* Americans (African-Americans, Asian-Americans, Italian-Americans, Mexican-Americans, etc.). Philosophically, the problems and disruptions that result when *hyphenated* Americans and ethnically diverse groups express their identities must be viewed in the context of other alternatives. The U.S. experiment with slavery, Hitler's quest for a pure race, ethnic cleansing in the former Yugoslavia, and countless other ruthless attempts to produce a common culture and heritage resulted in unimaginable chaos and human suffering.

However, on several occasions the United States has demonstrated that it has the willingness to acquire the enlightenment, commitment, and resolve to rise above all attempts to spread the misguided notion that the country can be stronger with a singular culture and ethnic heritage. In the future, vocational education must become more proactive and play even more significant roles in bringing about a national philosophy that enhances and promotes diversity. Tech prep, the integration of academic and vocational education, and various other restructuring techniques are providing vocational education with new options to enhance diversity via fruit salad approaches. However, visionary leadership will be essential as vocational educators seek to transform and act upon their commitment to diversity and help the United States become more competitive on a global basis. To assist vocational educators with these advocacy and enhancement roles, the following readings are suggested:

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