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#### ABSTRACT

This paper is intended to assist vocational educators in meeting the career development needs and aspirations of migrant youth. It examines the unique characteristics of migrant youth and develops a general life-cycle model of their vocational development. This comparative analysis provides the vocational educator with a basis for identifying programmatic efforts to enhance the career achievements of this special population. The paper addresses crucial issues that must be resolved through basic and applied research before migrant youth can effectively enter a broader labor market. These issues include the handicapping effects of poverty, geographic mobility, ethnicity, and language barriers as they have an impact upon the vocational development of migrant youth. Other concerns considered are the educational, psychological, and physical problems unique to migrant youth and their forced entry into agricultural labor. Recommendations are made for breaking the cycle of limited vocational alternatives for migrant youth. For example, it is suggested that vocational education programs be designed as a response to the total context of the life style of migrant youth in order to develop adequate vocational skills. Modifying vocational education programs to meet these needs includes providing strong programs to develop communication skills, to master basic skills, to enhance positive self-concepts, and to provide a futures orientation. Suggestions for further research also are given. (KC)

# CE032 427

# Vocational Education√or MIGRANT YOUTH

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#### **FOREWORD**

Vocational Education for Migrant Youth addresses crucial issues that must be resolved before migrant youth can effectively enter a broader labor market. It should provide the vocational educator with a basis for identifying programmatic efforts to enhance the career achievements of these youth.

This paper is one of seven interpretive papers produced during the fourth year of the National Center's knowledge transformation program. The review and synthesis in each topic area is intended to communicate knowledge and suggest applications. Papers in the series should be of interest to all vocational educators including teachers, administrators, federal agency personnel, researchers, and the National Center staff.

The profession is indebted to Dr. J. Steven Picou for his scholarship in preparing this paper. Dr. Richard Santos of The Ohio State University and Katherine Abbie West and Dr. Patricia Worthy Winkfield of the National Center for Research in Vocational Education contributed to the development of the paper through their critical review of the manuscript. The author would like to acknowledge the support and suggestions of Teresa Scheid-Cook, William P. Kuvlesky; Sara Lopez, and James W. Lemke. National Center staff on the project included Alta Moser, Shelley Grieve, Raymond E. Harlan, Dr. Judith Samuelson, and Dr. Jay Smink. Editorial assistance was provided under the supervision of Janet Kiplinger of the Field Services staff.

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#### **EXECUTIVE SUMMARY**

The purpose of this paper is to assist vocational educators in meeting the career development needs and aspirations of migrant youth. The paper examines the unique characteristics of migrant youth and develops a general life-cycle model of their vocational development. This comparative analysis provides the vocational educator with a basis for identifying programmatic efforts to enhance the career achievements of this special population

This paper addresses crucial issues that must be resolved through basic and applied research before migrant youth can effectively enter a broader labor market. These issues include the handicapping effects of poverty, geographical mobility, ethnicity, and language barriers as they impact upon the vocational development of migrant youth. Other important concerns considered here are the educational, psychological, and physical problems unique to migrant youth and their forced entry into agriculture labor.

Recommendations are made for breaking the cycle\_of limited vocational alternatives for migrant youth. The author recommends that vocational education programs be designed as a response to the total context of the life-style of migrant youth in order to develop adequate vocational skills. Modifying vocational education programs to meet the unique career development needs and aspirations of migrant youth includes providing strong programs to develop communication skills, to master basic skills, to enhance positive self-concepts, and to provide a futures-orientation.

The conclusion contains suggestions for further research. These include a compilation of more accurate and complete data on migrant youth, such as their characteristics, needs, and geographical mobility patterns, and an exploration of the need or feasibility for interstate program coordination and cooperation among vocational educators working to meet the needs of migrant youth.

#### INTRODUCTION

When other children are just beginning to come into their own, just beginning to explore and search and take over a little of the earth, migrant children begin to lose interest in the world outside them.

-Robert Coles, Uprooted Children.

During the last decade vocational education has become increasingly sensitive to the special problems and needs of unemployed youth. In addition, the unique career problems of minority and female adolescents have occupied the attention of educational scholars and researchers. Given this increased attention and concern for the educational and vocational achievements of youth who may be disadvantaged, it is puzzling that contemporary educational researchers have all but overlooked the problems and needs of the children of migrant workers.

When migrant workers are viewed as a group, they constitute the most poorly educated and poorly paid workers in the national economy (Kleinert 1969). Due to the unusual characteristics of their parents' lives, the children of migrant workers are especially disadvantaged. Migrant youth move from one school district to another as their parents seek employment in agriculture or in an agriculture-related industry. Furthermore, the children often leave school at a very early age to work in the fields in order to contribute to the family's economic survival.

The cycle of poverty and underemployment into which migrant children are born provides few opportunities for improving their labor market potential. Mechanization in agricultural production will increase, meaning that technology will continue to impact upon the already minimal earning power of migrant workers. Thus the need for vocational training programs and alternative career opportunities for migrant youth is particularly acute.

The primary objective of this paper is to review and present a synthesis of the literature of vocational education and the career development of migrant youth. The approach for meeting this objective entails a consideration of the unique characteristics of migrant youth. The significance of these characteristics then will be examined in terms of a general life-cycle model of vocational development. This comparative analysis will provide a basis for identifying programmatic efforts that can enhance the career achievements of this special population. Finally, some crucial issues that must be resolved through basic and applied research before migrant youth can effectively enter a broader labor market will be identified.

Demographic estimates by reason show that the largest proportion of migrant workers begin their following of harvests in the authwest. Therefore, this work focuses on the provision of vocational education to those you as a means of highlighting the varied and complex issues that characterize the difficulties of migrant youth nationwide. With the exception of the language barrier, the problems identified and discussed in this paper are applicable to migrant youth in all regions of the United States.

#### THE "FORGOTTEN MINORITY"

The study of migrant youth presents a unique problem to educators and social scientists. This problem exists in both theoretical/conceptual and empirical types of analysis and can be summarized as "the problem of identification." The continuous seasonal mobility of migrants and the fact that migrant workers and their families constitute a very small group in contrast to other sociodemographic populations partially explain the low visibility of this group. A variety of available data is presented in this section to establish some major sociodemographic characteristics of migrant workers and their children.

#### Estimates of the Migrant Population

Since 1910 American society has experienced a steady decline in the total number of people who engage in farm labor (Smith 1970). It is estimated that in 1910 nearly 13.5 million people were engaged in agricultural labor; by 1970 this number had declined to approximately 4.5 million people.

Numerous estimates of migrant farm workers, however, differ widely. The U. S. Department of Agriculture reported in 1968 that approximately 400,000 to 450,000 farm workers could be classified as migrant workers (USDA 1968). Some writers have estimated that there were as many as 4 million migrant seasonal workers in 1976 (Wall 1976); yet others contend that in 1977 there were approximately 400,000 to 800,000 migrants (Cavenaugh 1977). Rural America, Inc. (1977) estimated that approximately 5 million migrant and seasonal agricultural workers and their dependents resided in the United States. Some researchers report a steady decline since 1965, when approximately 450,000 migrant workers were estimated to have been employed in the farm labor force (Rural Manpower Service 1971).

This decline has not been uniform across all regions of the United States. Smith (1970) pointed out that the declining farm labor market is primarily the result of the rapid and widespread mechanization in agricultural production. Farm mechanization has been most prevalent in the Midwest; while in other regions of the United States—the Southeast and Southwest—this pattern has been slower to emerge (Smith 1970).

The uneven reduction in farm labor also reflects the fact that in the Southeast and . Southwest, a large pool of relatively inexpensive labor has been available throughout the years. This inexpensive supply of farm laborers has been drawn mainly from two groups—Mexican-Americans and blacks. Furthermore, it is not coincidental that the two states that at present bave the greatest number of hired farm workers, Texas and California, are also the states with the largest concentration of Mexican-Americans (Smith 1970). But in light of the general historical trend toward increased mechanization, it is apparent that migrant laborers will steadily continue to lose opportunities for earning money as migratory farm workers (Ulibarri 1966).

#### Migratory Patterns

It is not surprising that nationwide estimates of the total migrant farm worker population are so inconsistent. A 1968 U.S. Department of Agriculture report estimated that almost 50 percent of all migrant workers traveled within 75 miles of their home to work, and that more than 20 percent traveled 1,000 miles or more. Such mobility alone makes it difficult to estimate total numbers of migrant farm workers.

Information on migrant workers is available, however, by geographic regions of the United States. This breakdown may provide more reliable estimates because it is related to migrant's home bases, or communities of origin. The four major regions identified include the Great Lakes states, the Western and Rocky Mountain states, the Southern and Atlantic Seaboard states, and Texas (Rural Manpower Service 1971). Table 1 provides estimates of the number of migrants who have a home base in each region. By far, the largest number of migrant workers originates in Texas.

TABLE 1

MIGRATION POPULATION DISTRIBUTION BY HOME BASE, 1970

Home-Base ` / Region	. Estimated Number of Migrants	Percentage
Great Lakes States	7,000	1
Western and Rocky Mountain States	140,000	1 21
Southern States ,	165,800	27
Texas _ Δ	319,000	51
TOTAL	631,800	100

SOURCE: Rural Manpower Service 1971.

The migratory patterns of farm worker families in the United States are illustrated in figure 1, interstate migration can be seen as three major patterns, or "streams," of geographical movement that characterize how migrant families follow a series of harvest jobs.

# FIGURE 1 NATIONAL FARM WORKER MIGRATION PATTERNS



As Binder and Kinsey (1977) have documented, each of these three major routes is most active during the early spring, summer, and fall. The eastern stream consists predominantly of black workers who follow a pattern of moving up through the Atlantic states as far as New England, beginning in early spring. This pattern culminates when most of the farm workers return to their home base in Florida by December. The western stream originates in Southern California and the Pacific Coast states. It is primarily made up of Mexican-American families who move up the West Coast to the state of Washington (Binder and Kinsey 1977).

The largest migrant worker movement occurs within the midwest stream that begins in Texas. Migrant workers leave their home bases in early spring and move to various North Central, Mountain, and Pacific Northwest states. A second group of workers based in the Rio Grande Valley area moves northwesterly through Texas to New Mexico, Arizona, and California. The third group migrates northward to North Dakota, Michigan, and New York (The President's Commission on Mental Health 1978). This complex pattern of movement is further compounded by the fact that about one-third of the migrant workers in the midwest stream work in regions of Texas other than where they live (Migrant and Seasonal Farmworkers in Texas 1976).

Mexican-American migrant workers tend to travel with their families, often with extended family groups. The size of the Mexican-American migrant family is quite large, averaging about 6.5 persons. The average black migrant family contains 2.8 persons, which may mean that black migrant workers do not travel with their families (Rural Manpower Service 1971).



The problem of accurately identifying the number, location, and migration patterns of these workers is perplexing. Truman Moore (1965) contended that in the United States better estimates are available for the number of migratory birds than migratory workers. Obviously, the lack of a centralized system for identifying migrant workers and the lack of coordination among programs targeted for various subgroups of this population contribute to the situation. In addition, none of the five major federal statistical agencies responsible for estimating the number of migratory and seasonal farm workers utilize the same definitions for migrant, seasonal, or farm work (The President's Commission on Mental Health 1978). Inconsistencies in the proffered definitions and the lack of centralized information systems have restricted research and resulted in uneven funding for programs. Federal programs have been based on projections ranging from as few as 1.5 million people to as many as 6.0 million (Lillesand, Kravitz, and McClelland 1977; Rural America, Inc. 1977).

#### Migrant Life-style

Migrant workers are primarily subsumed under the more traditionally recognized minority groups of black Americans and Mexican-Americans, with Mexican-Americans making up the largest ethnic category of migrant workers (Cavenaugh 1977; Day 1975). According to Wirth (1945):

Minority groups are those people, who because of their physical or cultural characteristics, are singled out from the others in the society in which they live for differential and unequal treatment, and who therefore regard themselves as objects of collective discrimination. (p. 347)

Those who experience differential and unequal treatment maintain a disadvantaged position in the occupational structure and in society in general. The disadvantaged position of minorities is particularly applicable to migrant youth because problems related to minority groups in general are compounded by the job-related life-style of migrants. Some of the main life-style characteristics of migrant families are low income, poor housing, and poor health.

#### Low Income

Migrant youth are children whose families obtain a substantial-portion of their total incomes from migratory labor activities or food-processing operations. The average wage estimate for migrant workers ranges from \$1,500 to \$2,700 per year (Rural Manpower Service 1971; U. S. Department of Agriculture 1968). The low income of migrant workers reflects the unpredictability and seasonal nature of their occupational pursuits. Although an amendment to the Fair Labor Act in 1974 did include provisions for farm workers, they rarely receive minimum wages (The President's Commission on Mental Health 1978):

The uncertainty of the demand for migrant labor is complicated by United States immigration policies that allow the temporary entry of agricultural laborers from Mexico and the West Indies (The President's Commission on Mental Health 1978). The constant influx of legal aliens and their active participation in agriculture-related jobs increase the size of the pool of

available farm workers and thereby reduce the migrant workers' income potential. Research findings suggest that border crossers, both legal and illegal: (\*) take jobs that would otherwise employ residents of the United States, (2) further debress wages in a severely restricted labor market, and (3) encourage residents of border areas to seek employment elsewhere as agricultural workers (North 1970). Given the low wages and the constant competition of foreign workers, the income potential of migrant workers is exceedingly poor.

#### Poor Housing

The housing units where migrants live are generally owned by growers who provide these shelters as partial wage payments. Studies on living conditions of migrant and seasonal farm workers, presented to the President's Commission on Mental Health, reported the following findings:

- A study of housing provided to migrant families in Kansas found that 90 percent of the available housing was inadequate and did not meet minimum standards (Inter-America Research Associates 1975).
- A 1974 study of migrant camps in Indiana found instances where (1) occupants had to open sliding metal doors to obtain ventilation; (2) urinals were not functioning; (3) there were large holes in floors, ceiling, and walls; and (4) the water source was located in the middle of a hog pen. Much of the housing was very old and comprised of such things as barracks from prisoner-of-war camps, renovated chicker coops, and corn cribs (Indiana Migrants 1974).

Such studies clearly identify the appalling nature of migrant poverty. In his testimony before a Senate subcommittee, Dr. Raymond Wheeler, representing the National Sharecroppers Fund, described the living conditions of migrant workers as similar to those of slaves. Wheeler (1976) noted:

We saw housing and living conditions horrible and dehumanizing to the point of disbelief ... without heat, adequate light or ventilation, and containing no plumbing or refrigeration. Each room (no larger than 8 x 14 feet) is the living space for an entire family, approximately suggesting slave quarters of earlier days. ... (p. 3)

As recently as November 30, 1981, the "Good Morning America" ABC television show interviewed a migrant worker from North Carolina who was held against his will and forced to work without pay. Narrator David Hartman labeled this case "slavery in America, 1981."

#### Poor Health

Poor housing and living conditions directly relate to the health of migrant workers and their children. The life expectancy of the migrant worker is very low (forty-nife years), while it has also been estimated that around 60 percent of all migrants are under twenty-five years of age (Cavenaugh 1977). Wey and Cheyney (1972) provided the following estimates regarding the health of migrant families:

- Approximately 6,500 members of migrant families are diabetic.
- More than 5,000 members of migrant families are tubercular.
- Nearly 10,000 children suffer from untreated iron deficiency anemia.
- Approximately 2,500 babies of migrant families die in their first year of life due to congenital disorders and diseases.
- A significant number of migrant children under the age of eighteen have cardiac damage due to rheumatic fever.
- From 20,000 to 30,000 members of migrant families suffer from enteric parasitic infestation.

In addition, lead poisoning, which can destroy the function of the peripheral nerves, has been found in large numbers of migrant children. This results primarily from young children eating lead-based paint chips (Osband et al. 1972).

Many other illnesses found in migrants are related to the lack of proper body waste disposal and washing facilities and to the lack of protected water supplies. Hookworm, for example, is transmitted from the feces through bare feet into the body. Parasite infestations in farm worker populations are astronomically high. In a California study, the expected mortality rate from diarrhea was found to be seven times greater for farm worker children than for the general population (Beck 1977).

In a 1973 epidemic in Florida that was traced to an unprotected water supply in a labor camp, a total of 225 cases of salmonella typhoid infection was found. Congressional hearings on the epidemic revealed that workers were living in subhuman conditions and that very serious health hazards existed because federal laws and regulations were not complied with or enforced. Following the hearings, a complete environmental study was conducted and recommendations made. However, when the study was repeated one year later, it was found that none of the recommendations had been implemented (Subcommittee on Agricultural Labor, U.S. House Committee 1973).

Serious health threats come to migrant families, especially expectant mothers, from working in fields where toxic substances are used in growing crops. Pesticide residues have been shown to cross the placental barrier from the expectant mother to the fetus. Field workers who have been exposed to certain pesticides have been found to suffer from sterility, anxiety, depression, and a variety of psychoses (Yoder, Waston, and Benson 1973; *Preliminary Report on Fieldworkers Exposed to DBPC* 1973). Since many hazardous chemicals are used in combination, the deleterious consequences for the health and development of children from such exposure cannot be accurately estimated. Current legislation offers little hope for improved conditions for migrant workers. The Environmental Protection Agency does not provide a system through which workers can file complaints about exposure to toxic chemicals (American Friends Service Committee 1976).

Migrant families are often plagued with mental health problems, as well as with physical ailments. Alcoholism, drug addiction, and schizophrenic psychoses are prevalent conditions. They affect migratory farm workers three times more often than working middle-class Americans (Hollingshead and Redlich 1967). Bastide (1972) offered that this rate may be even higher.

#### THE VOCATIONAL DEVELOPMENT OF MIGRANT YOUTH

The extreme poverty faced by migrant families profoundly affects their housing, nutrition, and health care. These life-style factors, in turn, impinge negatively upon the vocational development of migrant youth. Because many migrant youth experience failures in the traditional school setting, they tend to view the classroom as a hostile environment. The absence of immediate rewards in their initial encounters with schools soon results in a lack of interest in academic achievement.

For the purposes of this paper, vocational evelopment will be viewed as a lifelong process. Systematic models will be used to provide a general framework for relating the unique characteristics of the lives of migrant youth to important career contingencies associated with vocational development.

#### Impact of Migrant Life-style on School Achie ment

Recent estimates indicate that there are approximately 800,000 migrant children in the United States; as many as 300,000 of these youth are thought to be working (Beck 1977). Approximately 80 to 90 percent of all migrant youth leave school before graduating with 60 percent leaving before the ninth grade (Dunbar and Kravitz 1976).

The problems of loss of school time, irregular attendance, movement among several schools, and resulting educational deficiencies were identified nearly fifty years ago by Marion Hathaway (1934). The persistence of these conditions is reflected in more recent studies that reported: (1) the achievement of migrant children in elementary school is two to three years behind that of nonmigrant youth; (2) only 10 percent of migrant youth graduate from high school; (3) a large number of migrant youth have high rates of absenteeism from school (People Who Follow the Crops 1978); and (4) an extremely limited number of migrant youth benefit from secondary vocational education programs (Cavenaugh 1977). Some factors that contribute to the continuation of these problems are discussed briefly.

#### The Effects of Geographical Mobility

Short-term geographical mobility patterns, which characterize the work activities of migrant families, are seen as having disastrous effects on educational achievement among migrant youth. As noted in the congressional amendment to the Elementary and Secondary Education Act (ESEA) of 1965:

g

The children of migratory agricultural workers present a unique problem for educators. Migratory workers travel from community to community in order to work. They often settle in a single community for two months or less. Consequently, their children are seldom in school long enough to participate in school activities, some spend only two to six weeks in any one school district ouring the harvest season. Well over half of all migrant children are not achieving at their grade level. . . . (U. S. Congress 1966, pp. 14-15)

Barresi (1980) noted that research on geographical mobility suggests that self-concept, school achievement, and parental involvement in school are all adversely influenced by serial movement from district to district.

The importance of continuous attendance by students in modern public education cannot be overemphasized. The relationships among families, schools, and community provide for the coordination of educational, nutritional, health, social, and career services to students in various grades. The articulation of curriculum from kindergarten through twelfth grade is important for sequential continuity in the depth and scope of subject matter, as well as in the introduction of new courses.

According to Gonzales (1981), continuous attendance can be seen as horizontal continuity and curriculum coordination as vertical continuity. In light of these definitions, migrant youth are denied the benefits of both horizontal and vertical continuity. This situation, then, generates the academic and social problems that limit school success.

#### Influences on Self-concept

Migrant youth are easily identified in harvest communities and schools and are not well accepted. Stigmatized because of their parents' socioeconomic status, they are viewed as a temporary problem that will depart within four to eight weeks. Such prejudicial and discriminatory practices affect the achievement of all migrant youth, Caucasian as well as ethnic and racial minority youth. But when bilingual educational services are not available, the school environment-becomes even more hostile to Spanish-speaking youth (Anderson and Boyer 1978)

Lack of acceptance in harvest communities, school failures, and continuous migration all impact on self-concept and reflect a social/psychological syndrome that restricts future school achievement and fosters high dropout rates. Numerous studies have documented this condition among migrant youth (Gecas 1974; Lutz 1974; Salinas 1976; Stockburger 1977; Banks 1976). These findings strongly suggest that migrant youth perceive their own situations as problematic and begin to evaluate their self-worth negatively at an early age. Many migrant youth begin to exhibit antisocial behavior in childbood, and high rates of emotional disorders are found among this group (Dida 1975).

#### Factors Affecting the Vocational Development of Migrant Youth

General aspects of a lifelong vocational development process are presented in this section. Career contingency factors (figure 2), such as health care and childhood socialization and their relationships to the occupational choices and vocational opportunities of migrant youth, are discussed.



#### Health Care Factors

Health problems are important to take into consideration when attempting to understand the limited educational and vocational achievements of migrant youth. In the rural environment of the migrant child, medical facilities and health services are generally inadequate. A migratory life-style further contributes to inadequate health care. For instance, poverty leads to the lack of transportation to available health care facilities. And the lack of bilingual personnel at those facilities compounds the problem; non-English-speaking migrants cannot give medical personnel a full and precise picture of their needs.

Further, many expectant migrant mothers do not receive prenatal care, which includes instruction on balanced diet and regular physical examinations. Inadequate nutrition during the prenatal period has strong implications for the cognitive development of children. Evidence suggests that the consequences of malnutrituion during this period may actually affect the development of offspring through the third generation, even when second generation offspring have an adequate diet (Zamenhof, Van Martens, and Grauel 1971). Commenting on the consequences of intrauterine malnutrition, Neligan (1971) said that "the results all point to the same direction, suggesting that there is an adverse effect upon intelligence and emotional development..." (p. 453).

Postnatal malnutrition also appears to have negative effects on physiological and cognitive growth. Vital organs, such as the heart and brain, and emotional development are adversely influenced by inadequate diet. Shneour (1974) noted: "Early-life malnutrition is a probable cause of brain-deficiences. The problem is now a social one for-which a scientific solution exists" (p. 186).

Malnutrition among migrant children is an exceedingly difficult problem; and its correction may be more complicated than a simple diet alteration (Crowley and Griesel 1966). The extreme poverty facing migrant families precludes an easy resolution. The consequences of pre- and postnatal malnutrition for migrant families have not been fully evaluated, but it is apparent that the health and social development of migrant youth are seriously affected. It is even thought that general malnourishment and the effects of poor living and work environments may explain, in part, the high rate of mental retardation among migrant youth. Research should be directed toward rigorously examining this possibility.

#### **Childhood Socialization Factors**

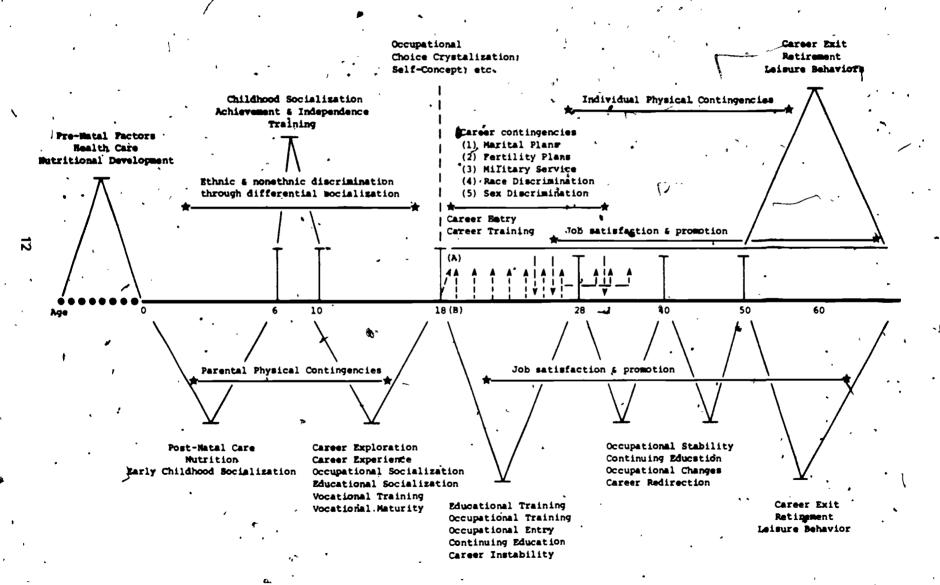
Literature on vocational psychology, occupational sociology, and educational research stresses the importance of the career socialization process for vocational development (Crites 1969; Haller and Portes 1973). Social research on the career achievement process has demonstrated the critical role that significant others play in a youth's development—in the forming of educational values and in the making of decisions related to career choice (Picou, Hotchkiss, and Curry 1976). Parents, relatives, teachers, peers, and other sources of influence have been found to be "definers" of vocational behavior and "models" for vocational activities (Haller and Woelfel 1972).

Ellis and Lane (1963) noted, and others have corroborated, that the initial impetus for social mobility resides in the nuclear family. Besides providing the foundation for personality and cognitive development, socialization within the nuclear family provides the basis for instilling the desire for early independence and the motivation to achieve. The early exposure to nonfamilial role models is determined by family actions; the range and type of model are usually a consequence of a family's socioeconomic status. As Grissom (1971) observed:



FIGURE 2

A LIFE-CYCLE TAXONOMY OF CAREER BEHAVIOR



SOURCE: Picou, Hotchkiss, and Curry 1976.



We readily accept the truism that what the child is when he comes to school is crucially influenced by the social, cultural, economic, psychological, and spiritual environment in which he has lived from the moment of conception until the formal educational experience begins. (p. 139)

Migrant youth are seriously disadvantaged during the early stage in the life cycle of vocational development (figure 2). The educational achievement level of the parents of migrant youth is exceedingly low. The range of occupational role models to which these youth are exposed is virtually nonexistent, except for models found in field hand apprenticeship activities. Career exploration for migrant youth is limited to agriculture-related labor activities.

#### Influences on Occupational Choice

The next stage in the life cycle of vocational development is the occupational choice phase; one which both psychologists and sociologists regard as a developmental process (Ginzberg et al. 1951; Super 1953; Rodgers 1966; Pigou and Campbell 1975). The developmental approach proposes that occupational choices are made during late adolescence after the youngster has exploited occupational alternatives in prior "fantasy" and "tentative" stages (Ginzberg et al. 1951; Super 1953). Youth, during these earlier stages, tend to fantasize a broad range of vocational alternatives that are later modified in light of "realistic" appraisals of career alternatives. Vocational psychologists have refined this approach by looking at specific types of personality development. Personality orientations (Roe 1957) and the interaction between environment and personality have been studied (Holland 1973; Campbell 1975).

Sociologists have also utilized the developmental approach as a basis for formulating theoretical conceptualizations of the occupational choice process. Blau and associates (1956) were among the first to emphasize the dual consequences of social structure and reported that "on the one hand social structure influences the personality development of the choosers; on the other, it defines the socioeconomic conditions in which selection takes place" (p. 533). Occupational choice involves a compromise process where ideal preferences and actual expectations merge in light of information obtained from past experiences and the individual's environment (Blau et al. 1956).

A more elaborate specification of the career choice process was presented by Falk (1975), who integrated the sociological and psychological approaches. The socialization process is a primary consideration in this synthesis of theories of occupational choice. The details of Falk's model are presented in figure 3 and are based on five basic propositions:

- 1. Structural antecedents will, at different points in time, exert differential effects on all subsequent behavior.
- 2. Structural antecedents will combine with intervening processes to affect an individual's occupational choice.
- 3. An individual's occupational choice, at any point in time, will be the result of an interactive rather than a linear process.
- 4. As a result of structural antecedents and intervening processes, the individual will develop a perception of reality about the occupational world in which some occupations will be perceived as more desirable than others.



5. The individual will engage in a compromise process so that some occupation is crystallized and chosen. (Falk 1975, pp. 71-73)

Although some attempts have been made to modify models of vocational development in light of the unique characteristics of special minority groups (e.g., see Osipow 1975), no specific consideration has been presented for migrant youth.

Migrant youth are extremely disadvantaged with regard to each antecedent structural factor listed. They are restricted because of their socioeconomic and ethnic status and structural, inequality, and because they lack occupational information. These negative inputs, as well as perceptions that their vocational opportunities are restricted, occur repeatedly throughout all phases of their early life cycles, and depress their potential for forming positive self-concepts, it is apparent that self-concept formation in migrant youth is predicated primarily on negative and inadequate socialization.

The career choice process is inadequately developed because economic necessity forces migrant youth to work in the fields to provide additional income for their families. They often begin working at an early age and usually do not attend school prior to their entry into the labor force. Older children frequently are given the task of taking care of younger family members while both parents engage in field or food-processing work.

The developmental stages of occupational choice are "truncated" (Osipow 1975), and the vocational choice process becomes frozen during the "tentative" stage. The consideration of alternative vocational opportunities is nearly nonexistent for migrant youth prior to their entry into the "realistic" phase of the career choice process.

#### **Limitations to Vocational Opportunities**

Given that the occupational choice process for migrant youth is restricted, forced entry into the migrant worker's cycle of vocational limitation is somewhat predictable. Career entry and development (figure 2) are relatively inapplicable to the vocational development of migrant youth. In fact, when migrant youth enter the labor force, the negative consequences of structural antecedents continue and the resultant life-style of poverty, powerlessness, and mental and physical disorders continues in the new generation of works.

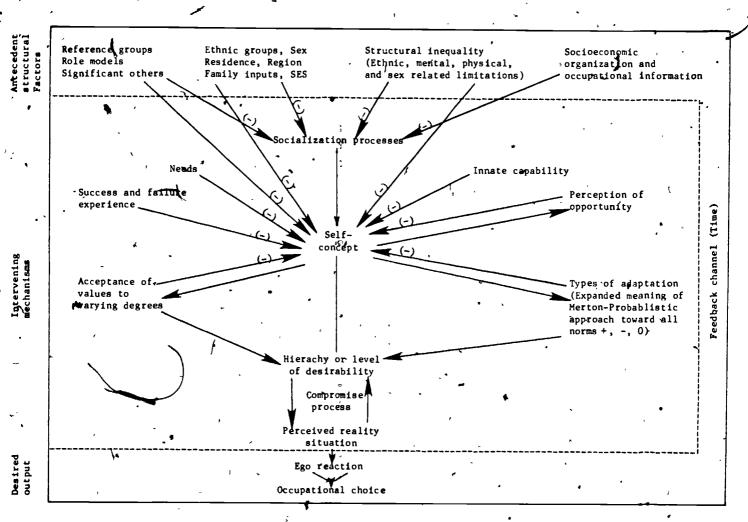
The vocational choices of migrant youth, after the transition from school to work, are severely limited because of earlier restrictions caused by lack of education, training, and marketable vocational skills. Forced entry at a very early age into field jobs also acutely limits their vocational potential. The career entry process of migrant youth does not provide meaningful alternatives to agricultural labor. At best, a variety of unskilled domestic and construction jobs may be available to these workers. A form of "occupational floundering" characterizes the migrant youth's work life. Unsystematic movement from one unskilled job to another usually occurs.

Any discussion of the vocational development patterns of migrant youth beyond the career choice and career entry stage is strictly academic. By this point in the life cycle, migrant youth are handicapped to the degree that meaningful career development is virtually impossible. This situation is graphically summarized in figure 4, a representation of the cycle of vocational limitation of migrant youth. Beginning with the migrant role of adults the diagram reveals a series of restrictive life-style and vocational contingencies. Moving to the critical stages of vocational choice and entry into the labor force, the model shows how migrant youth are handicapped by their unique, poverty-stricken lives.



FIGURE 3

A SYSTEMS APPROACH TO THE STUDY OF THE OCCUPATIONAL CHOICE
PROCESS



SOURCE: Falk 1975. Reprinted by permission.

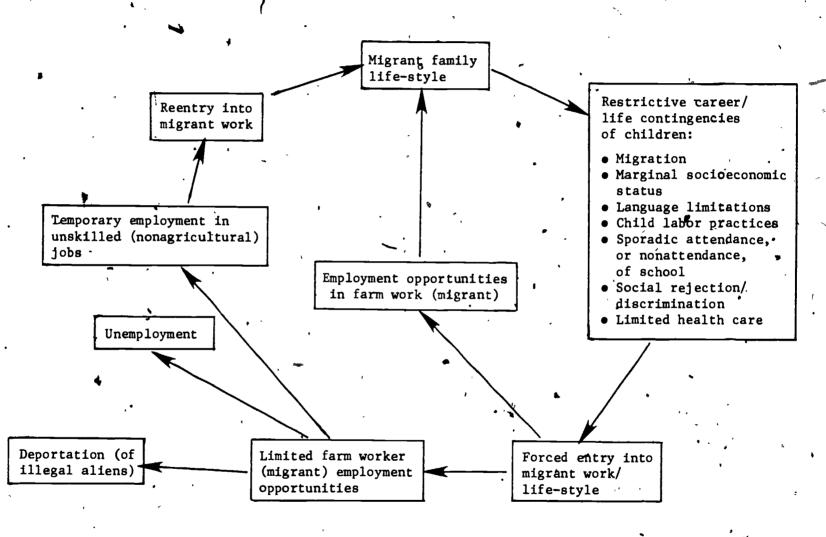


The vocational choice process of migrant youth is negatively affected by educational, psyshological, and physical problems, as well as by forced entry into agricultural labor. Their employment as migratory workers then perpetuates this cycle through another generation. If alternative occupational opportunities arise, they are limited to unskilled, nonagricultural jobs. Frequently, a fluctuating pattern of short-term unskilled employment continues until reentry into the migrant worker labor force is made. Thus the cycle of vocational limitation continues.



FIGURE 4

CYCLE OF VOCATIONAL LIMITATION OF MIGRANT YOUTH



### RECOMMENDATIONS FOR IMPROVED VOCATIONAL EDUCATION FOR MIGRANT YOUTH

The hope that vocational education can contribute to the reduction of restrictions on career opportunities for migrant youth is great. However, research indicates that less than 1 percent of all migrant youth registered in school in the United States are enrolled in vocational education programs (Poe and Rice 1979). Vocational education is not regarded as desirable among minority populations in general, and migrant youth in particular. Minority group parents generally prefer a college preparatory curriculum for their children, because they believe that vocational education is for students of low ability (Schulman, Williams, and Guerra 1973). The limited number of bilingual vocational education programs is also acknowledged as a major factor contributing to the lack of participation by Mexican-American youth, including migrants.

It is apparent that the organization, structure, and operating procedures of traditional schools, vocational schools included, actually compound, rather than solve, the educational problems of migrant youth. Effective vocational education programs must be designed as a response to the total context of the migrant life-style. In response to the cycle of vocational limitation, adequate vocational skills need to be developed starting from an early age (preschool). As Taylor (1965) noted:

When we talk about equality of opportunity for all American children, we are really talking about an equal chance for every child to be taught by a teacher who understands him, takes his limitations and strengths into account and has command over a body of knowledge relevant to his teaching and to his place in contemporary society. (p. 75)

#### **Modifying Vocational Education Programs**

In the vast majority of cases, the present school system can offer the migrant child only failure (Kleinert 1969). Migrant children cannot readily compete with middle-class children in school. The numerous handicaps migrant children bring with them as a result of their life-style preclude equality of opportunity in the classroom. Innovative programs are needed in order to meet the vocational needs of migrant youth. This primarily means inclusion of the following: (1) the development of communication skills, (2) the development of basic skills, (3) the development of a positive self-concept, and (4) the development of a futures orientation.



#### **Developing Communication Skills**

It is often exceedingly difficult to gain the trust and cooperation of migrant children; therefore, educators must attempt to develop communication strategies to effectively transmit information to them. To achieve this goal, teachers must have a knowledge of the unique communication problems that exist among migrant youth.

The [migrant] child has restricted experiences and often limited conversational opportunities for language development. He may not comprehend what he sees or hears. Models of good sentence structure and vocabulary are not readily available to him. He speaks and listens in his dialect or own language, not understanding what is going on in class. For example, in arithmetic, "to carry" has no meaning to him, but "to tote" does. Thus many times he is overpowered by middle class vocabulary. (New York State Bureau of Elementary Curriculum Development 1968, p. 13)

The development of communication skills in migrant youth presupposes informed, concerned teachers who can establish an initial rapport with students.

In the case of the vast majority of migrant youth, developing improved communication skills also means increasing the level of bilingual education offered. Vocational education programs have had minimal impact on Spanish-speaking youth in general, and migrant youth in particular (Salazar and Christiansen 1976). It is also clear that many Hispanic migrant youth may "settle-out," or obtain permanent employment in states other than Texas or California. This possibility necessitates bilingual vocational education in all states in which migrant youth attend school. Otherwise, many migrant youth will be excluded from the benefits of vocational education.

#### Developing Basic Skills

The two- to three-year lag of migrant youth behind comparable middle-class youth in academic achievement is a critical factor in explaining their high dropout rate. Although vocational education has traditionally focused on teaching job skills, it is apparent that basic skills should be included in vocational education programs designed for migrant youth. The development of reading, writing, and mathematics skills would enhance vocational training and would provide a basis for more specialized training in technical occupations.

#### **Developing Positive Self-concepts**

Improvements in academic achievement and communication skills can contribute to helping inigrant youth overcome negative self-concepts. For instance, improved communication skills are tools that can help migrant youth better cope with their personal problems through the expression of personal attitudes and area.

Prosser and Quigley (1950) have long recommended that human relation training be an integral part of vocational education. Blake (1979) recently gave attention to such an undertaking. It is apparent that vocational education programs designed to enhance migrant youths' self-concepts will have to direct attention to a variety of self-awareness and self-development programs (Blake 1979). Such programs, in addition to enhancing self-concept, can also provide a basis for teaching awareness of the world of work, encouraging good health and nutrition habits, and presenting information concerning economic and educational values (Sutton 1972).

EDIC:

#### Developing a Futures Orientation

The migrant youth's life-style is based on a short-term perspective related to a concern for day-to-day survival. This orientation to the present precludes the development of values and attitudes that promote deferred gratification and encourage long-term vocational goals. Achieving reorientation in thinking would necessarily include providing youth information regarding the means (job training) whrough which long-term career goals may be accomplished.

The one way in which vocational education programs can promote the development of such a futures orientation is to provide migrant youth with vocational exploration experiences and the training necessary to obtain jobs and to achieve desired career goals. Migrant youth need to be made aware of the necessity of obtaining vocational training for securing jobs. A combination of vocational training, improved communication skills, and a greater understanding of the world of work should substantially increase the job market potential of migrant youth (Sutton 1972).

#### **Toward Flexible Delivery Systems**

The literature suggests that migrant workers constitute a unique minority group in definite need of the services of contemporary vocational education. However, vocational education programs have traditionally been organized for nonmobile populations. Vocational educators must develop interstate systems and flexible programs that can adjust to the singular circumstances of the migratory life-style. This is especially important because migrants appear to be moving greater distances than in previous years, and this suggests increased time is spent out of school during the mobile period (Tarver and McLeod 1976).

#### **Problems Associated With Flexible Delivery Systems**

Some problems that need to be addressed on the issue of developing flexible and interstate programs include the comparability of available courses, credits earned, and state competency examinations.

Lack of comparable earned credits. In order for graduation to become a realistic possibility for migrant youth, they must be able to move through a series of vocational education programs at various schools and earn comparable credits. Significant differences now exist among states in organization, requirements, and the structure of vocational education. This fact is compounded by regional variations in job availability and corresponding vocational training programs. Training that requires highly specialized equipment often cannot be found in all of the school districts that migrant youth move through during a harvest season.

Vocational education programs designed for migrant youth need to be mobile or effectively. interrelated across state lines to ensure cumulative training experiences. Such a coordinated system would necessitate some type of centralized agency to monitor and facilitate the training and development of migrant youth from school district to school district.

Dissimilarity in courses. The problem of course availability is related to, yet is distinct from, the issue of comparability of credits. Since migrant students enroll in a number of schools at various times in the school calendar, they often find, even when similar courses or programs are available, they are entering programs behind the other students. This signation suggests that



coordination and standardization of vocational education programs is necessary if migrant youth are to be better served. Not only must the problems of comparability and similarity of vocational education courses offered be solved, but the rate of progression within the courses must be coordinated. The potential for this appears reasonable, but the development and management of such an undertaking would be extremely complex and demanding. State laws currently reflect more than 116 different subject matter requirements (Hunter 1980).

Incompatibility in state minimum competency exams. Vocational education programs for migrants are affected by various types of educational legislation that may differ considerably by state (Hunter 1980). Incompatible minimum competency exams and, hence, different expectations may actually have negative consequences on the vocational training of migrant youth (Hunter 1979). Such circumstances may reinforce the perception many migrant youth have that school is an environment of failure.

Thirty-eight states now give minimum competency tests; although not all of these states employ them for graduation requirements, some are beginning to (Hunter 1980). This trend may very well increase in the future and create additional problems for the educational and vocational achievements of migrant youth.

#### Possible Program Solutions

Current strategies that appear to have nationwide applicability to the problems associated with flexible delivery systems are (1) credit accrual and exchange programs, (2) environmental change and academic supplemental programs, (3) alternative degree programs, and (4) homestudy programs (Hunter 1980).

Credit accrual and exchange programs. Hunter (1980) used the Washington/Texas Program and the California Portable Assisted Study Sequence Program (PASS) as examples of credit accrual and exchange. The programs are geared to the curriculum and course offerings of the home-base school district, with the PASS program consolidating migrant youth into one facility. Both programs are attempts to introduce continuity into the education of migrant youth. The home-base school monitors student progress in courses required for graduation. Schools along the migrant stream provide special help—individual tutoring, small group instruction, and testing—throughout the mobile harvest period, upon request from the students (Hunter 1980).

Environmental change and academic supplemental programs. The Migrant Attrition Prevention Program (MAPP) developed at St. Edward's University in Austin, Texas, exemplifies the approach of changing the environment of and providing supplementary academic help to migrant youth (Hunter 1980). Results of this program have been positive in that a majority of participants have increased their basic academic skills and actually have gone on to attend college (Migrant and Seasonal Farmworkers in Texas 1976). The MAPP program responded to the economic demands placed on migrant youth by paying a stipend to participants. This program also attempted to alter the migrant youths' environment by relocating the participants in university dormitories (Hunter 1980).

The structuring of an alternative environment establishes a social-basis for the development of new values, attitudes, and behavior. In terms of the occupational choice process, positive inputs are substituted for negative ones. Financial support allows migrant youth to focus more attention on future vocational decisions, rather than on immediate needs. Although apparently effective, the program is expensive (Hunter 1980).



Alternative diploma programs. The General Equivalency Degree (GED) and High School Equivalency Programs (HEP) offer alternative strategies upon which migrant vocational education programs can be developed (Hunter 1980). For example, vocational education could incorporate on-the-job training (OJT) as a means for providing skill training and some income. However, OJT, like GED and HEP, may not provide socialization benefits to migrant youth (Hunter 1980). Nonetheless, this potential for alternative vocational education programs must be carefully evaluated. Once again, for vocational education, the problem of coordination between spates regarding the availability of on-the-job training and income is very significant.

Home-study programs. The California Portable Assisted Study Sequence Program (PASS) system is used by migrant youth partly as a home-study program. The potential of this approach as a model for developing migrant vocational education programs is limited. The primary reason for this is the difficulty of making necessary machinery and equipment available in the homes. In addition, the problematic nature of the home environment of most migrant youth would preclude any effective home-study program. However, the possibility that certain components of vocational education may be taught through home-study techniques needs to be systematically evaluated.

#### Future Research and Development Considerations

\*Migrant youth constitute one of the most socially restricted and economically depressed populations in contemporary America. The prospects for the vocational development of these youth appears extremely limited. The fact that so few migrant youth actually participate in vocational education reflects both the unique characteristics of this group and the traditional grientation of vocational education to nonmobile student populations.

Vocational education has the potential to enhance the vocational development of migrant youth. Nonetheless, in order to achieve this potential, vocational education must approach the problem of migrant youth in an innovative and flexible manner. Additional data must also be collected regarding program effectiveness so that dead-end or limited approaches can be abandoned and innovative programs can be installed with minimal investments of time and resources:

#### Better Demographic Data

The development of improved vocational education programs will require more accurate and complete data on migrant youth, their characteristics, needs, and geographical mobility patterns. Many migrant youth are citizens of Mexico; this further complicates the accurate identification and maintenance of seconds. The needs of migrant youth may require coordinated international networks of vocational education programs with compatible curricula (Hunter 1980).

#### More Effective Vocational Education Programs

The needs of adolescent migrants differ from those of other adolescents. The consequences of poverty, such as poor nutrition and poor health, plus problems such as drug and alcoholabuse, all signify specific needs of migrant youth. Alternative counseling strategies should be provided in vocational education programs for these students (Savage and Matthews 1980). Research is critical if effective counseling programs are to be developed.



The problem of accurate records and differences in vocational education programs must be addressed by research and development efforts to increase the occupational opportunities for migrant youth. The complex issue of interstate program coordination and cooperation must be resolved. And more effort must be exerted to incorporate bilingual instruction into programs. Implementation of strategies for improving basic and communication skills of migrant youth and for helping them develop positive self-concepts and an orientation to the future should also have a high priority.

#### The Political Realities of Migrant Work

It is apparent that many political and educational leaders may not be aware of and are therefore insensitive to the unique problems experienced by this "forgotten minority." The inability of migrant workers to lobby effectively for political decisions promotes an attitude of indifference on the part of many political and educational leaders (Hunter 1980). At the heart of the matter, though, is the occupational role of migratory agricultural labor. In order to have an effective impact on this situation, one could surmise that the elimination of this form of labor would result in a nonmobile population of youth who could be trained in assorted technical yocations. However, migrant workers and their dependents serve the vested interests of a sector of the agricultural system in the United States. The elimination of this labor situation appears to be highly improbable in the near future.

In light of the unique characteristics of migrant youth, contemporary vocational education faces a formidable challenge. This challenge will require immediate attention during a period of time when funding levels are being reduced systematically throughout all levels of government. This study is a preliminary overview of the vocational educational needs of migrant youth. Future research and development must begin to enhance the vocational future of these youth so that equal opportunity can be a reality for America's forgotten minority."



#### REFERENCES

- Americans Friends Service Committee. *Pennsylvania Farm Labor Plan*. Prepared for the Department of Community Affairs and the Interdepartmental Council of Seasonal Farmworkers. Philadelphia, PA: American Friends Service Committee, 1976.
- Anderson, T., and Boyer, M. Bilingual Schooling in the United States. 2d ed. Austin, TX: National Educational Laboratory Publishers, 1978.
- Banks, James A. "Cultural Pluralism and the Schools." The Education Digest 40 (1976): 21-23.
- Barresi, J. "Policy Options for Mobile Handicapped Students." Unpublished paper from the Policy Options Project. Reston, VA: Council for Exceptional Children, September 1980.
- Bastide, R. The Sociology of Mental Disorder. New York: David McKay, 1972.
- Beck, R. Migrant Health Problems. Washington, DC: Inter-America Research Associates, 1977.
- Binder, E. P., and Kinsey, R. H. A Special Report on Some Migrant Education. Austin, TX: St. Edwards University, 1977.
- Blake, D. L. Dynamics of Human Relations in Vocational Education. Cranston, RI: The Carroll Press, 1979.
- Blau, O. M.; Gustad, J. W.; Jessor, R.; Parnes, H.S.; and Wilcox, R. C. "Occupational Choice:

  A Conceptual Framework." Industrial and Labor Relations Review 9 (July 1956): 531-543.
- Campbell, R. E. "Special Groups and Career Behavior: Implications for Guidance." In Career Behavior of Special Groups, edited by J. S. Picou and R. E. Campbell. Columbus, OH: Charles E. Merrill, 1975.
- Cavenaugh, David N. Migrant Child Labor. Washington, DC: Inter-America Research Associates, June 1977.
- Coles, Robert. Uprooted Children: The Early Life of Migrant Farm Workers, Pittsburgh: University of Pittsburgh Press, 1970.
- Crites, J. O. Vocational Psychology. New York: McGraw-Hill, 1969.
- Crowley, J. J., and Griesel, R. D. "The Effect on Growth and Behavior of Rehabilitating First-and-Second-Generation Low Protein Rats. *Animal Behavior* 14 (1966): 506-517.
- Day, James E. Migrant Education. New York: Philosophical Library, 1975.
- Dida, A. "Social Aspects of Alcoholism with Special Review of Alcoholism Between Under-Aged Migrants." Revita Za Sociologije 5 (1975): 37-45.



- Dunbar, T., and Kravit, L. Hard Traveling: Migrant Farm Workers in America. Cambridge, MA: Ballenger, 1976.
- Ellis, R. A., and Lane, C. "Structural Supports for Upward Mobility." American Sociological Review 28 (1963): 743-756.
- Falk, W. W. "An Integrative Model of the Occupational Choice Process." In *Career Behavior of Special Groups*, edited by J. S. Picou and R. E. Campbell. Columbus, OH: Charles E. Merrill, 1975.
- Gecas, Viktor. "Self-conceptions of Migrant and Settled Mexican-Americans." Social Science Quarterly 55 (1974): 579-595.
- Ginzberg, E.; Ginsburg, S. W.; Axelrad, S.; and Herma, J. R. Occupational Choice. New York: Columbia University Press, 1951.
- Gonzales, J. L. Continuity of Education Experiences for Migrant Students. Denver, CO: Education Commission for the States, Interstate Migrant Education Project, May 1981.
- Grissom, C. E. "We Must Listen Beyond Words." Childhood Education 48 (December 1971): 939-142.
- Haller, A. O., and Portes, A. "Status Attainment Processes." Sociology of Education 46 (Winter 1973): 51-91.
- Haller, A. O. and Woelfel, J. "Significant Others and Their Expectations: Concepts and Instruments to Measure Interpersonal Influences of Status Aspirations." Rural Sociology 37 (1972): 591-621.
- Hathway, Marion. The Migratory Workers and Family Life. Chicago: University of Chicago Press, 1934.
- Holland, J. L. Making Vocational Choices. Englewood Cliffs, NJ: Prentice-Hall, 1973.
  - Hollingshead, A. B., and Redlich, F. C. Social Class and Mental Illness: A Community Study. New York: John Wiley, 1967.
  - Hunter, B. Credit Accrual and Exchange Seminar Report. Washington, DC: Education Commission of the States, April 1980.
  - Hunter, B. "Effect of Minimum Competency Testing on Migrant Children." Unpublished report.

    Denver, CO: Education Commission of the States, Interstate Migrant Education Task Force,
    October 1979.
  - Indiana Migrants: Blighted Hopes, Slighted, Rights. Indiana Advisory Committee to U.S. Commission on Civil Rights. Washington, DC: U.S. Commission on Civil Rights, 1974.
  - Inter-America Research Associates. Migrant Housing Needs Study: State of Kansas. Washington, DC: Inter-America Research Associates, December 1975.



- Kleinert, John E. "The Florida Migrant." Phi Delta Kappan 51 (October 1969): 90-93.
- Lillesand, David; Kravitz, L.; and McClelland, J. An Estimate of the Number of Migrant and Seasonal Farmworkers in the United States and Puerto Rico. Washington, DC: Legal Services Corporation, May 1977.
- Lutz, J. A Critical Review of Migrant Education Programs. Lewisburg, PA.: Susquehanna Intermediate Unit, 1974.
- Migrant and Seasonal Farmworkers in Texas. Austin, TX: Governor's Office of Migrant Affairs, July 1976.
- Moore, Truman. The Slaves We Rent. New York: Random House, 1965.
- Neligan, G. A. "The Effects of Intrauterine Malnutrition upon Later Development in Humans." *Psychiatria, Neurologia, Neurochirurgia* 74 (1971): 451-456.
- New York State Bureau of Elementary Curriculum Development. Educating Migrant Children.
  Albany Y: State Education Department, Bureau of Elementary Curriculum Development,
  1968.
- North, D. S. The Border Crossers: People Who Live in Mexico and Work in the United States. Washington, DC: Transcentury Corporation, 1970.
- Osband, M. E., et al. "Lead Paint Exposure-in Migrant Camps." Pediatrics 49 (1972): 604-606.
- Osipow, S. "The Relevance of Theories of Career Development to Special Groups: Problems, Needed Data, and Implications." in *Career Behavior of Special Groups*, edited by J. S. Picou and R. E. Campbell. Columbus, OH: Charles E. Merrill, 1975.
- People Who Follow the Crops. Rocky Mountain Staff Report to the U.S. Commission on Civil Rights. Washington, DC: The Commission on Civil Rights, Washington, DC: The Commission on Civil Rights, Rocky Mountain Regional Office, 1978.
- Picou, J. S. and Campbell, R. E., editors. Career Behavior of Special Groups. Columbus, OH: Charles E. Merrill, 1975.
- Picou, J. S.; Hotchkiss, H. L.; and Curry, E. W. Significant Other Influence, Career Choice and Achievement: Selective Theoretical and Conceptual Approaches. Research and Development Series No. 111. Columbus, OH: Center for Vocational and Technical Education, The Ohio State University, 1976.
- Poe, J. R., and Rice, J. Needs, Barriers and Evaluation of Secondary Migrant Vocational Education:

  Barriers and Evaluation of Secondary Migrant Vocational Education: An Assessment of the
  Southeastern U.S. Chapel Hill, NC: Systems Sciences, 1979.
- Preliminary Report on Field Workers Exposed to DBPC. Washington, DC: Human Effects Monitoring Branch, Office of Pesticides Programs, Environmental Protection Agency, September 1977.
- Prosser, C. A., and Quigley, T. H. Vocational Education in a Democracy. 2d ed. Chicago: American Technical Society, 1950.

- Rodgers, R., H. "The Occupational Role of the Child: A Research Frontier in The Developmental Conceptual Framework." Social Forces 45 (1966): 217–224.
- Roe, A. "Early Determinants of Vocational Choice." Journal of Counseling Psychology 4 (1957): 212–217.
- Rural America, Inc. Where Have All the Farmworkers Gone? The Statistical Annihilation of Migrant/Seasonal Farmworkers by Federal Agencies: An Analysis of the Federal Effort to Define and Count Migrant and Seasonal Farmworkers. Washington, DC: Rural America, Inc., September 1977.
- Rural Manpower Service. The Last Yellow Bus: A Comprehensive Migrant Manpower Program.

  Washington, DC: United States Training and Employment Service, 1971.
- Salazer, A., and Christiansen, J. E. The Need for Bilingual Vocational Education Programs in Secondary Schools in Texas. College Station, TX: College of Education, Texas A&M University, 1976.
- Salinas, Claudio. An Investigation of the Needs of Children in the Migrant Education Program'in the State of Oklahoma. Summary Report. Oklahoma City: Oklahoma State Department of Education, 1976.
- Savage, L. G., and Matthews, C. O. "The Counseling Needs of Migrant Adolescents in Vocational Training Programs." In Youth Employability: Four Award Winning Monographs. Columbus OH: The National Center for Research in Vocational Education, The Ohio State University, 1980.
- Schulman, Sam; Williams, Earl J.; and Guerra, Roberto S. Mexican-American Youth and Vocational Education in Texas: Summary and Recommendations. Houston: Center for Human Resources, 1973.
- Shneour, R. The Malnourished Mind. Garden City, NY: Anchor Press, 1974.
- Smith, T. L. "Farm Labor Trends in the United States, 1910–1969." International Labour Review 102 (1970): 149–169.
- Stockburger, Cassandra. Community Services for Children of Migrant Farm Workes: A Status Report. New York: National Organization for Migrant Children, 1977.
- Subcommittee on Agricultural Labor, U.S. Committee on Education and Labor. Hearings: Typhoid Outbreak in Dade County, Florida, 1973
- Super, D. E. "A Theory of Vocational Development." The American Psychologist 8 (May 1953): 185-190.
- Sutton, E. "Working More Effectively with Migrants in our Schools." In *The Ripe Harvest*, edited by A. B. Cheyney. Miami, FL: University of Miami Press, 1972.
- Tarver, J. D., and McLeod, R. D. "Trends in the Distance of Movement of Interstate Migrants."

  Rural Sociology 42 (1976): 119-126.

- Taylor, Harold. "The Need for Radical Reform." Saturday Review, 20 November 1965, pp. 75–76.
- The President's Commission on Mental Health. Migrant and Seasonal Farmworkers. Washington, DC: Report of the Task Panel, 15 February 1978.
- Ulibarri, J. "Education of the Adult-Spanish Speaking Migrant and Ex-Worker." Adult Leadership 15 (September 1966): 80–82.
- U.S. Congress, House of Representatives, H.R. Department Number 1814, Joint Report, p. 10, S. Dept. No. 1974, 1966.
- U.S. Department of Agriculture. "The Migratory Farm Worker." Monthly Labor Review 91 (June 1968): 10-12.
- Wall, James L. Vocational Education for Special Groups. Washington, DC: American Vocational Association, 1976.
- Wey, Herbert W., and Cheyney, Arnold B. "National Goals for Migrant Education." In *The Ripe Harvest*, edited by A. B. Cheyney. Miami, FL: University of Miami Press, 1972.
- Wheeler, Raymond. Testimony Before Senate Subcommittee on Migratory Labor, Committee on Labor and Public Welfare, Washington, DC: 91st Congress, 20 July 1976.
- Wirth, Louis. "The Problem of Minority Groups." In *The Science of Man in World Crisis*, edited by R. Linton. New York: Columbia University Press, 1945.
- Yoder, J.; Watson, M.; Benson, W.W. "Lymphocyte Chromosone Analysis of Agriculture Worker Workers During Extensive Occupational Exposure to Pesticides." *Mutation Research* 21 (1973): 335–340.
- Zamenhof, S.; Van Martens, E.; and Grauel, L. "DNA (Cell Number) in Neonatal Brain: Second Generation (F<sub>2</sub>) Alteration by Maternal (F<sub>2</sub>) Dietary Protein Restriction." Science 172 (1971)

