ABSTRACT

This thorough review of the literature highlights six recurrent themes: (1) Women, minority students, and students from low income families have not obtained occupational information and assistance in relating their abilities and interests to career options and skills training programs. (2) Placement services within the school improve school accountability as well as the relationship of the school to the business community. (3) Current experiments with computerization of information for counseling do not appear to be cost-effective. (4) Counselor education does not prepare counselors for practical career guidance needed by the noncollege-bound. (5) Credential requirements inhibit employment of personnel who might bring practical information to the noncollege-bound. (6) Personnel working with noncollege-bound students are not providing practical career guidance services. The study cites specific recommendations in accordance with these findings. (Author/LAA)
Practical Career Guidance, Counseling, and Placement for the Noncollege-Bound Student: A Review of the Literature

Executive Summary

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Palo Alto, California
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The project reported herein was performed pursuant to a contract from the U.S. Office of Education, Department of Health, Education, and Welfare. The opinions expressed, however, do not necessarily reflect the position or policy of the Office of Education, and no official endorsement by the Office of Education should be inferred.
Executive Summary

a. Context

This review synthesizes evidence concerned with realignment of practical career guidance and counseling for noncollege-bound students that has occurred since 1968. In commissioning work on the review, the U.S. Office of Education first declared that the public accepted the need for practical career guidance and counseling. The Office next argued that in 1968 "...students needing vocational guidance and counseling assistance and school placement services rarely received them." Finally, the Office claimed in 1972 that "...current reports indicate that the needs of noncollege-bound students have still not been met."

This review accepts USOE's assumptions about the current need for practical career guidance and counseling for noncollege-bound students and investigates the dimensions of the realignment needed to satisfy the identified need. USOE took the first step in determining the dimensions of the needed realignment by stipulating six hypotheses that served as this review's outline. The first five of these hypotheses define conditions and needed realignments in the following terms:

1. Women, minority students, and students from low income families have not obtained occupational information and assistance in relating their abilities and interests to career options and specific skills training programs.

2. Placement services operated within the school improve school accountability, and promote and enhance the relationship of the school with business, industry, and other agencies providing jobs for students.

3. Current experiments with computerization of information for counseling and guidance purposes do not appear to be cost effective; other media, methods, and materials must be developed to provide career information.

4. The education and training of guidance counselors have not prepared them to perform the practical career guidance and counseling needed by the noncollege-bound.

5. Credentialing requirements inhibit employment of personnel with work experience and paraprofessionals who might be able to bring practical career information and activities to the noncollege-bound.

Since the major purpose of the review is to provide an opportunity for individual assessment of the extent to which vocational guidance and counseling functions have been realigned since 1968, the review concludes with the sixth hypothesis:
6. The functions of guidance and counseling personnel working with noncollege-bound students have not been realigned to provide practical career guidance.

b. Method of Reviewing the Literature

The literature reviewed constituted a wide variety of documents. Literature with which the authors were familiar was augmented in several ways. First, using pertinent descriptions, standard indices of educational and psychological literature were searched. Second, a subcontract was let to the ERIC/CAPS Center, University of Michigan, to undertake a comprehensive search and provide an extensive bibliography of information relating to the review hypotheses. Third, a panel of experts in the various career guidance, counseling, and placement areas provided many key documents that were not turned up in the other two searches. Fourth, documents were obtained from the directors of three comparable projects that either had searched or were searching for career education and guidance programs and materials. Finally, persons from the U.S. Office of Education or the Department of Health, Education, and Welfare were consulted for additional suggestions.

AIR project staff identified, read, and abstracted more than 350 significant documents related to the literature review hypotheses. These documents were screened from a larger number of potentially significant publications. They included such documents as proposals, final reports, progress reports, curriculum guides, journal articles, convention papers, newsletters, books, tapes, and personal communications. The focus of the review was on documents produced after 1968, but critical material generated before that date was also considered to some extent.

c. Findings

The literature which was identified and reviewed consisted mainly of expert opinion. Very few research studies exist to deal with the issues represented by the hypotheses. There is an obvious need for further research on these questions as will be explicated in greater detail in later sections of this document. The literature which was reviewed revealed the following findings in relation to hypotheses on student need, placement, and follow-up, data and information approaches, counselor training, paraprofessionals, and realignment.

1. Women, minority students, and students from low income families have not obtained occupational information and assistance in relating their abilities and interests to career options and specific skills training programs.

The literature indicates that this hypothesis is partially true. Women, minority students, and students from low income families who are not college-bound currently do not receive sufficient assistance. However, the literature on this subject generally does not relate to whether help has been given but rather to the kind of help that should be given. In general, these students
need different assessment instruments and different occupational information than they now receive. Care must be exercised in testing because of the cultural, class, and sex biases inherent in many tests and their interpretations. Counselors should also keep in mind needed positive and realistic self-concepts, a sense of agency, and decision-making competence. Cultural difference should be made explicit in guiding and counseling women and minority students; health needs of minority groups should receive particular emphasis. Stereotypes that are potentially detrimental to the aspirations of women and minority students abound in occupational literature, and counselors must therefore exercise care to help women and minority students perceive what is real. Also, these students particularly need the help of those who understand and want to further their aspirations, rather than stifle them in the "reality" perceived by the counselor alone. Group techniques and use of paraprofessionals are two means at the counselor’s disposal that can help in meeting such aspirations.

2. Placement services operated within the school improve school accountability, and promote and enhance the relationship of the school with business, industry, and other agencies providing jobs for students.

This hypothesis also proved to be only partially true. Placement is ordinarily organized to embrace only vocational and educational areas, although follow-up of dropouts is occasionally included. However no effort is generally made to expand the effects of placement into other areas of a broadly defined career. At least 90% of the documents reviewed support the assumption that narrowly defined school-based placement and follow-up services should exist. Dissenters believe that maintaining placement programs in both schools and state employment agencies is uneconomical. They do not agree with the hypothesis' premise that school placement and follow-up services promote schools' accountability and enhance their relationships with those who will provide needed jobs. The literature indicates that placement services get youths employed. The literature also indicates that some self-enlightened businesses and industries cooperate with schools; none of the literature covers the accountability that such cooperation achieves within schools. There are no explicit studies of the process, products, and cost-benefits of such services in the direct terms of the hypothesis. In addition, few data exist on the availability of placement services in schools or the quality of placement services offered. In general, education-community relationships apparently require careful reassessment and improvement.

3. Current experiments with computerization of information for counseling and guidance purposes do not appear to be cost-effective; other media, methods, and materials must be developed to provide career information.

The literature on computer and other media systems do not permit the required judgment on this hypothesis. There is one study of the cost-effectiveness of such systems, but its design oversimplifies to such an extent that its findings have little significance. Although an impressive variety of media, methods, and materials have been developed for provision of career facts without computer involvement, the literature fails to reveal studies of their costs and impacts. Thus there is no information on the cost-effectiveness of
4. THE EDUCATION AND TRAINING OF GUIDANCE COUNSELORS HAVE NOT PREPARED THEM TO PERFORM THE PRACTICAL CAREER GUIDANCE AND COUNSELING NEEDED BY THE NONCOLLEGE-BOUND.

Data are not sufficient on which to base acceptance or rejection of this hypothesis. The literature generally suggests that counselor education and training should embrace practical career guidance and counseling required by noncollege-bound students. In addition, the literature recommends that counselors participate in a supervised interdisciplinary practicum, be trained in supervision, learn to be effective in a liaison role with business and industry, and remain knowledgeable and concerned about the values and needs of youths and the communities in which they live. However, the literature indicates that training of typical counselors is short, diffuse, and generally lacking in preparation for group techniques, how to modify education based on knowledge of student needs, and working with adults. Counselors are also held to be specifically deficient in background information about work, educational or occupational opportunities that represent alternatives for noncollege-bound youths, and specific information on opportunities in local areas. Gaining work experience outside education is recognized as one of several alternative means of increasing awareness of the world of work, but opinion is divided on whether work experience should be a requirement for counselor certification or not. Some efforts to improve counselor education are being conducted in the areas of accreditation, certification, and development of new training models.

5. CREDENTIALING REQUIREMENTS INHIBIT EMPLOYMENT OF PERSONNEL WITH WORK EXPERIENCE AND PARAPROFESSIONALS WHO MIGHT BE ABLE TO BRING PRACTICAL CAREER INFORMATION AND ACTIVITIES TO THE NONCOLLEGE-BOUND.

This hypothesis can be rejected. Only a few credentialing requirements apply to the hiring of paraprofessionals and personnel with work experience. The factors that do inhibit employment of paraprofessionals seem to be that there are few if any organizations representing them so that their case is not presented as forcefully as it should be and counselors are trying to develop professional roles for themselves and fear potential dilution in the quality of guidance and counseling if it is offered youths by anyone other than themselves. Generally, it is agreed that the counselor should be assisted by support personnel but there is little agreement on the exact duties that support personnel can and should perform although work has started on such definitions and their acceptance. A clear statement of functions, preservice training and orientation, development of service as an integral part of a school's program, in-service training, careful supervision, and provision of feedback and discussion are offered as conditions needed to make the introduction of paraprofessionals successful and satisfying to both paraprofessionals and counselors.

6. THE FUNCTIONS OF GUIDANCE AND COUNSELING PERSONNEL WORKING WITH NONCOLLEGE-BOUND STUDENTS HAVE NOT BEEN REALIGNED TO PROVIDE PRACTICAL CAREER GUIDANCE SERVICES.

The realignment hypothesis is the major hypothesis of this study. As indicated, the literature suggests that: (1) the needs of women,
minority students, and students from low income families are being met only partially; (2) it is not really known whether school placement services in schools promote accountability and effective relationships with the business community; (3) the cost-effectiveness of computers and other media in guidance and counseling has not yet been ascertained; (4) it seems that counselors should be educated in practical career guidance and counseling if recommendations of counselor educators were followed but counselors still exhibit specifically identifiable deficiencies; and (5) employment of paraprofessionals is inhibited by conditions other than credentialing requirements. These findings as well as those specifically considered in relation to the realignment hypothesis point up the fact that the functions of guidance and counseling personnel generally have not been aligned to provide practical career guidance for noncollege-bound students. Some schools are apparently making preliminary efforts in this direction. National priorities on identifying the academically talented were developed in the late 1950s. Money was made available, and state plans were established in line with those priorities. It now appears that different priorities are emerging but changes in the allocation of time and resources have not yet been made to any appreciable degree.

d. Recommendations

Data on practical career guidance and counseling that women, minority students, and students from low-income families receive indicate that these special groups do not receive sufficient assistance. However, a more important finding is that women and minority students need different instruments for personal assessment, different kinds of occupational information, and assistance from persons who truly want to help them. On the basis of these conclusions, the following recommendations are made:

1. Reliable, valid assessment measures must be developed and standardized on the target groups that they will be used to assess.

2. Counselors must allow students to make decisions that allow them to implement their unique potentials.

3. Minority, disadvantaged, and women students must be provided with role models with whom they can relate and these models must not be portrayed in terms of racial or sexual stereotypes.

4. The experiences that these students encounter in secondary schools must relate to their expressed goals.

5. Students with special needs must have high goals if they are to combat the fatalism that comes from living in this society; however, such goals must be supported by sound and realistic knowledge.

6. Counselors must be helped to understand their biases since individuals cannot work effectively with others without first dealing effectively with their own biases.

7. Counselors must make an explicit effort to understand the background
and culture of the target populations of students with whom they work, but they must also remain aware that each student is unique.

8. Conflicts that may result from differences in communication patterns should be pointed up; however, such differences should be tolerated.

9. Minority group counselors, in addition to counselors from the dominant culture, should receive both intensive and extensive training in working with minority students.

10. Counselors must be willing and encouraged to effect changes in the student's out-of-school environment.

Expert opinion notwithstanding, the literature neither supports nor rejects the hypothesis that placement and follow-up services in school promote accountability and effective relationships with the business community. In general, the overall education-community relationship seems to require attention and improvement. On the basis of these findings, the following recommendations are made:

1. Placement and follow-up services should be accepted as critical ingredients of a comprehensive set of practical career guidance and counseling services that should be available to all students in each school and should be integrated closely with other career planning and development resources for youth.

2. School-based placement (and follow-up) services should not exclude participation of, or cooperation with, state and local public employment services when available.

3. Placement and follow-up services should include career planning assistance for entrance into and follow-up in all areas of career—education, occupation, personal and social behavior, learning how to learn, social responsibility, and leisure.

4. Specific guidelines for and programs of placement and follow-up services demonstrating desirable features and providing training assistance to fellow educators seeking realignment of their services should be provided to facilitate needed realignments.

5. Directors of existing and planned placement and follow-up services should be given illustrations, guidelines, and instruction in comprehensive design, implementation, and evaluation so that they can collect and use accountability data on their services.

6. Evaluation should be shifted from merely counting the jobs that students were helped to secure through placement services to assessment of the service's fulfillment of actual student needs and the satisfactoriness demonstrated by youths.

7. Appropriate fact-finding studies in a sample of states or regions within key states should be conducted by impartial investigators to assess the quantity and quality of available placement and follow-up services on a national basis.
8. Experimentation should be undertaken on key alignment issues for the purpose of selecting cost-efficient strategies for specified youths under specified school conditions.

9. Employers should be assisted to shift the basis of their employment requirements to competency from certification.

Data do not exist on which to base the acceptance or rejection of the hypothesis that computerization of guidance and counseling is not cost-effective and that other media need to be developed as a result. On the basis of this conclusion, the following recommendations are made:

1. Attention should not be directed toward development of "other media, methods, and materials" for providing career facts and information but rather currently existing resources should be organized so that decisions about their use can be made on the basis of their relative costs and impacts.

2. On the basis of experience gained as a result of the emphasis in recommendation 1, operating systems should be constructed and rigorous assessment of their cost-effectiveness should be pursued.

3. Attention should be given to the potential impact and costs of automated and nonautomated approaches from the early stages of their research and development.

4. "How to do it" detail should be provided to investigators and practitioners so that necessary cost and impact studies can be continued.

5. Cost-efficiency studies must be conducted on alternative media, methods, and materials for providing career facts and information.

6. A taxonomy of fact and information presentations should be developed to facilitate cost and impact-based decisions regarding occupational data and information generation.

7. A comprehensive system of facts and information presentations should be developed for facilitation of the life career concept.

8. In connection with recommendation 7, evaluation should be conducted in terms of a more comprehensive and systematic planning process covering the program design-implementation-evaluation-feedback-revision cycle.

9. As a comprehensive program planning process emerges, attention must be given to ensure its compatibility with the educational context in which the program will be implemented.

10. Designers of approaches, especially automated strategies, for presenting facts and generating information should be encouraged at all times to explore alternatives for making their approaches more feasible in terms of costs while establishing their approaches on comprehensive and accurate data and information bases.
11. Since counselors' salaries are currently such a large part of guidance and counseling costs, evidence on the impacts and costs of personnel should be sought with as much or more energy as that devoted to seeking evidence on automated and alternative approaches.

Data suggest that some counselor educators seek to educate counselors to provide practical career guidance and counseling but that specific deficiencies in the backgrounds and education of counselors nonetheless exist. On the basis of this conclusion, the following recommendations are made:

1. The preservice education and training of guidance counselors should be concentrated on developing skills necessary to facilitate desired student outcomes.

2. Requirements across the nation for certification of school guidance counselors should be standardized and revised to reflect skills necessary to facilitate student outcomes. Also, periodic recertification of competency should be undertaken.

3. Comprehensive, well-planned programs of in-service education that focus on professional skills should be developed and all school counselors should participate in them.

Data suggest that employment of paraprofessionals and personnel with work experience are not hindered by credentialing requirements but rather by lack of understanding and acceptance of what a paraprofessional can and should do. On the basis of this conclusion, the following recommendations are made:

1. Efforts should be made to clarify further the role of support personnel in high school guidance and counseling programs.

2. The results of the recommendation 1 efforts should be applied to lessen the subtle resistance of counselors and other school personnel to the use of paraprofessionals and other assistance originating outside the educational establishment.

3. Local programs for employment of support personnel in high school guidance and counseling services should be planned and established with full regard for the factors known to contribute to the success of such programs.

Data bearing on hypotheses 1 through 5 as well as those bearing on the realignment hypothesis (6) suggest that some experimental efforts toward realignment have been started but that much more needs to be done in terms of such realignment. On the basis of this conclusion, the following recommendations are made:

1. Experts in the field of guidance and counseling should refrain from merely urging people to effect realignment and should provide more specific information on how to bring about realignment.

2. Realignment should be based on a planning model that includes assess-
ment of priority needs of target populations, statements of process and product objectives, selection of appropriate strategies, and evaluation of efforts.

3. Consistent efforts should be made continually to provide and take advantage of the results of research and pilot projects.

e. Concepts and Systems

The assumptions that underlie this review are that noncollege-bound students need occupational information and placement such as that which can be provided by media other than computers, particularly paraprofessionals, and that counselors are currently not prepared to meet this need. The literature supports the conclusion that practical career guidance and counseling for noncollege-bound students need further realignment. Women, minority students, and students from low income families need different kinds of personal and occupational information and assistance than they have been receiving. Furthermore, educational-community relationships need renewed attention and improvement. The media used in guidance and counseling generally should be studied for cost-effectiveness. Counselors need to become more aware of the world of work and its demands on individuals, and paraprofessionals should be incorporated into the guidance and counseling framework. The question then arises as to how this realignment can be effected.

The authors define career as an effect realized in the life of the individual that develops and, through career education, can be influenced by practical career guidance, counseling, and placement functions aimed at the areas of education, occupation, personal and social behavior, learning how to learn, social responsibility, and leisure activities. The authors then outline a set of career guidance functions to illustrate what will be needed in each of the six career areas. In considering the guidance, counseling, and placement functions needed in career education, the authors use the term "guidance" generically, thereby subordinating the specific interpersonal counseling process as a means of helping youths achieve guidance-related objectives. Automated and nonautomated instructional, counseling, placement, evaluation, and support procedures based on the individual planning and development needs of youths are all included in the authors' meaning of guidance.

A comprehensive career education is conceived that provides instruction and guidance (including some instruction as well) tailored to each youth's personal characteristics, background or experience, needs, and career goals. In comprehensive career education, each student should repeatedly engage in an individual planning process of selecting goals and planning activities to achieve them. The major system goal of these activities is individual comprehension and employment of purposeful action. In comprehension of purposeful action, individual needs become understood and the employment of purposeful action based on individual plans leads to individual feedback on or evaluation of satisfaction of an individual's needs.

A comprehensive career guidance system needs the following elements:
1. Definitions of the subpopulations constituting the total range of students, specification of desired competencies of individual youths in these groups, identification of the current status (entry level) of such competencies among youths, and development of meaningful statements of needs in terms of discrepancies between observed and desired status.

2. Organization of goal statements and related performance objectives derived from element 1 into clusters of goals and objectives to facilitate planning phases and assignment of priorities.

3. Exploration and selection of suitable learning experiences for each youth.

4. Exploration and selection of process objectives of counseling, instructional, and placement procedures for helping target groups of youths reach career planning and development objectives.

5. Comprehensive evaluation of a program's desired and unanticipated effects and revisions as needed.

The authors also reviewed the literature with the following four hypotheses in mind:

1. The target student populations (including the subpopulation of non-college-bound students) have been clearly delineated, and their priority career guidance, counseling, and placement needs have been identified.

2. Program product objectives have been stated in terms of measurable student outcomes derived from priority youth career guidance, counseling, and placement needs.

3. Program process objectives have been stated in terms of instructional and counseling procedures and materials appropriate to assisting students attain desired outcomes, and implementation strategies have been planned in terms of the counseling personnel services and school resources required to implement process objectives.

4. Program product objectives have been met, program process objectives have been achieved, and program implementation strategies have been employed as planned at an acceptable cost per student.

The review makes clear the fact that these four hypotheses cannot be accepted. Target populations are ordinarily not clearly delineated in literature about counseling and guidance. Program product objectives are rarely stated, and they are almost never stated in terms of measurable student outcomes. Program process objectives are occasionally stated for the education of counselors, but counselors generally fail to state their own program process objectives for assisting students in attaining desired outcomes. A new round of recommendations on instructional and counseling procedures and materials is now developing but those in guidance practice do not yet seem to be participating in that round.
These conclusions lead to the following final recommendation:

If guidance systems are to be realigned to meet genuine needs of youths as conceived by the authors, there is a major need for rigorous program development. The potential to conduct such development and evaluation requires explicit, clearly defined, and measurable program objectives and an accurate knowledge of the practical and political context in which judgments concerning achievement of these objectives must be made. Then, data generated by a program must be: correlated with these objectives, as specifically related to the behavior of members of the target population; collected accurately; presented in easily interpretable form; and provided in time to be used by decision-makers at all levels with a means to evaluate cost-benefits and cost-effectiveness.

Two additional products of the contract under which this literature review was produced include: (1) a series of case studies and (2) a final report. Thirteen programs which are making an illustrative attempt to deal with the needs of noncollege-bound youth were identified and described in 13 separate case study reports. The final report, which is entitled Planning, Structuring, and Evaluating Practical Career Guidance for Integration by Noncollege-Bound Youths, summarizes the findings and recommendations of this literature review, synthesizes the case studies, and outlines and illustrates a planning-evaluation model which program personnel may use in developing local career guidance programs for noncollege-bound and other youths.
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Many people made significant contributions to this literature review of selected aspects of career guidance, counseling, and placement for the non-college-bound. At the outset, this project required extensive search for relevant documents. Dr. Garry Walz and his associates at the University of Michigan ERIC Center on Counseling and Personnel Services reviewed their collection of documents and forwarded copies of pertinent manuscripts and references. Their efforts were most helpful. Two other consultants, Ms. Anna Miller Tiedeman and Ms. Dorothy Allen, made major contributions through identifying, reading, and abstracting a host of other documents. Their perseverance and skill in distilling the relevant portions of these numerous reports and manuscripts are gratefully acknowledged.

Once chapters of the review were drafted, Ms. Thelma Scott and Ms. Carol Arutunian, both members of the Youth Development Research Program (YDRP) at the Palo Alto office of the American Institutes for Research (AIR), provided helpful critical commentary. Ms. Laurie Hopkins, also from the YDRP staff, ably assisted in preparing the bibliography. Ms. Diane Thomas of Phoenix, Arizona provided a number of helpful insights. Final organizational editing was done by Mr. Gary Barrett. His efforts contributed greatly to the readability of the final document.

The help of the following professional consultants was appreciated throughout all phases of this review. They expanded its scope by suggesting a number of fugitive documents, and commented on the accuracy of reported findings. We give special thanks to Ms. Lillian Buckingham, Baltimore (Maryland) Public Schools; Dr. William Cash, University of Michigan; Dr. Norman Gysbers, University of Missouri; Dr. Charles Nichols, Minneapolis (Minnesota) Public Schools; Ms. Virgie Harris, Northwest Regional Educational Laboratory, Portland, Oregon; Dr. Gene Bottoms, Georgia State Department of Education; Dr. Anita Mitchell, Culver City (California) Unified School District; Dr. Donald Healas, Cleveland (Ohio) Public Schools; and Dr. Jo Ann Harris, Willowbrook High School, Villa Park (Illinois). Although in many respects they served as our national eyes and ears, they must not be held accountable for the final summaries, conclusions, and recommendations in the review. We, the authors, enjoy that responsibility.

We obtained both printed documents and oral recommendations from personnel in the United States Office of Education (USOE) and the Department of Health, Education, and Welfare (HEW), who served as informal advisors on this literature review project. These included Dr. Corrine Rieder, Director of the Career Education Task Force in the National Institute of Education (NIE); representatives from the Secondary School and Minority Student sections of the Office of Youth Affairs in HEW; Dr. Don Twiford, Bureau of Elementary and Secondary Education; Dr. Sidney High, Head of Exemplary Programs in the Bureau of Adult, Vocational and Technical Education (BAVTE); Mr. Michael Russo, Director of the Division of Vocational and Technical Education in BAVTE; Mr. George Klinkhamer, Bureau of the Educationally Handicapped; and Dr. Paul Manchek, Bureau of Education Personnel Development. Dr. Calvin Dellefield, Executive Director of the National Advisory Council on Vocational Education, also contributed copies of available reports and suggestions about other references. We sincerely thank all these people.
The assistance given us by Mr. David Pritchard, head of the Career Development, Guidance, Counseling, and Placement unit in BAVTE, helped us locate both people and manuscripts which were extremely valuable to this review. The value of the strong commitment of Ms. Dorothy Shuler, our USOE project monitor, deserves mention. It was a pleasure to work with her and receive her sensitive and insightful advice.

Finally, we express our thanks to Ms. Jan Jones and Ms. Jane Spangler who together typed draft after draft after draft of this review with exceptional skill and patience. A great deal of credit is due them for the accuracy and appearance of this final volume.

The authors of this document worked as a team throughout its research and production activities. Since it was difficult to differentiate the substance and amount contributed by each author, it was decided that the only appropriate sequence of authors was to list their surnames alphabetically.
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Chapter 1
REALIGNMENT OF PRACTICAL CAREER GUIDANCE AND COUNSELING SINCE 1968

a. Orientation to the Review

The literature review described in this report is intended to synthesize evidence on realignment of practical career guidance and counseling for non-college-bound students* that has occurred since 1968. The review assumes that readers of the report will be those who determine or administer educational policy concerning needed further realignment.

The writers of the report have two obligations in this review: (1) provide a factual base so that readers have the same bases of understanding that the authors had in reaching the tentative syntheses that underlie the report's recommendations and (2) provide educational decision-makers a structure for their own synthesis. In turn, the structure has two elements.

One of the two elements is an outline, which must be given in advance and which must be consistent with the subject to be synthesized. In this review, the subject of course is the realignment of practical career guidance and counseling since 1968. As shown in the next section, the review uses the outline requested by the U.S. Office of Education in commissioning the review. The primary purpose of the commission is to permit assessment of the need for further realignment of practical career guidance and counseling for noncollege-bound students; thus, the outline requested by the U.S. Office of Education is consistent with the potential need for further realignment.

The second structural element needed for synthesis consists of principles of synthesis. These principles must continually be weighed by readers rather than taken as fact. The authors have tried to be clear about their own biases as well as explicitly to include principles that helped them reach the syntheses that underlie the recommendations appearing at the end of each succeeding chapter.

b. Public Interest in Practical Guidance and Counseling for Noncollege-Bound Students

The National Defense Education Act of 1958 began a new era of federal participation in U.S. education. In that Act, the federal government initiated direct funding of school programs other than those in vocational and special education. The Elementary and Secondary Education Act of 1965 gave impetus to federal support of education by authorizing direct federal participation in the funding of elementary and secondary education programs. Although general support was offered districts through this Act, its level was restricted according to the income levels of a school district's inhabitants and was directed toward improvement of the education of children of poor families. Youths who do not enter college constitute the target population of this review, and many of these youths are from poor families.

*For the purpose of this review, noncollege-bound students are all those who plan to pursue a goal other than a four-year baccalaureate degree.
Federal support of vocational education was recently reorganized through the Manpower Development and Training Act of 1962, the Vocational Education Act of 1963, and the 1968 amendments to the Vocational Education Act. These statements of public need expressed through the U.S. Congress sharpen the public intention of improving education in the United States so that youths achieve practical outcomes such as work skills and employment on leaving school. Noncollege-bound students particularly need these practical outcomes.

These developments in federal legislation regarding U.S. education have had marked effects on guidance and counseling. Title V.A. of the National Defense Education Act of 1958 asked guidance personnel to emphasize scholastic talent and its cultivation by direct progression from secondary to posthigh school education. The Manpower Development Act of 1962, on the other hand, asked guidance personnel to stress job training and employment in jobs that were unfilled. A year later, the focus for guidance work under this Act shifted to the disadvantaged, and the Elementary and Secondary Education Act of 1965 introduced the same emphasis into school guidance. By the mid-1960s school guidance personnel were requested to stress the disadvantaged, their culture, their needs, and the provision of school programs to help these individuals fulfill their needs. Later in the 1960s, guidance and counseling personnel were urged to give increased attention to career development needs of noncollege-bound students, including students who train for employment in secondary school and who seek work immediately on graduation or departure from secondary school. In each instance, the public through its elected representatives has called on guidance and counseling to achieve public purposes. These purposes have vacillated and, if all are to be supported, in effect enlarge expectations of counseling and guidance.

In commissioning work on this review, the U.S. Office of Education outlined a clear picture of public recognition of a need for practical career guidance and counseling. The following words are part of this picture:

Congress clearly expressed concern about the availability of vocational counseling in hearings prior to the passage of the Vocational Education Amendments of 1968 (P.L. 90-575). The Act states that vocational education "...includes vocational guidance and counseling (individually or through group instruction) in connection with such training or for the purpose of facilitating occupational choices." Again Congress expressed concern about the status of such services in the hearings on HR 7429, HR 7898, and sections of S 659 (The Occupational Education Act of 1971) now under consideration. (RFP 72-42, p. 1)

In requesting this review, the U.S. Office of Education first characterized the 1968 condition of guidance functions as follows:

At the time the Vocational Education Amendments were passed in 1968, studies indicated that most guidance counseling programs in public secondary schools were directed almost entirely toward providing aptitude tests, advice and help for the college-bound students. Students needing vocational guidance and counseling assistance and school placement services rarely received them. (RFP 72-42, p. 1)
The Office then asserted:

Current reports indicate that the needs of the noncollege-bound students have still not been met. The general conclusion is that most if not all of these students need substantive information on jobs, skill training, two-year college programs with direct application to occupations and other information and assistance with a substantial vocational input that will help them find ways to earn a living. These students require help in relating their abilities, interests and personal desires to possible career options. (RFP 72-42, p. 1)

The RFP also stipulated that many assessments of guidance and counseling exist but that these documents have not been synthesized for administrators. This review attempts the desired synthesis.

c. Outline: The Review's Hypotheses

The U.S. Office of Education took the first step in synthesizing the realignment of practical career guidance by setting out six hypotheses. The six hypotheses in effect make up the outline of this review.

In reviewing the literature and writing this report, the authors became aware of additional principles that may assist an administrator in forming policies and taking actions related to needed realignment. The first principle of which the authors became aware is that five of the six hypotheses that determine the factual content of the review indicate the desired and present conditions of practical career guidance and counseling for noncollege-bound students. The sixth hypothesis addressed the question of whether practical career guidance and counseling have been realigned since 1968. The authors therefore organized the review to test the veracity of the following five hypotheses as requested by the U.S. Office of Education.

1. Women, minority students, and students from low income families have not obtained occupational information and assistance in relating their abilities and interests to career options and specific skills training programs.

2. Placement services operated within the school improve school accountability, and promote and enhance the relationship of the school with business, industry, and other agencies providing jobs for students.

3. Current experiments with computerization of information for counseling and guidance purposes do not appear to be cost-effective; other media, methods, and materials must be developed to provide career information.

4. The education and training of guidance counselors have not prepared them to perform the practical career guidance and counseling needed by the noncollege-bound.
5. Credentialing requirements inhibit employment of personnel with work experience and paraprofessionals who might be able to bring practical career information and activities to the non-college-bound.

As indicated, the major purpose of the review is to permit the reader to determine the extent to which vocational guidance and counseling functions have been realigned since 1968. In summarizing available recent literature regarding the extent to which guidance personnel and the schools in which they function have been realigned, the review tests the veracity of the sixth hypothesis:

6. The functions of guidance and counseling personnel working with the noncollege-bound students have not been realigned to provide practical career guidance.

d. The Problem of Synthesis: Diversity in Outlooks in the Literature

The literature review demonstrates general agreement among authors that all students need practical career guidance, but agreement ends there. When readers look at the diversity of recommendations to satisfy the need, they become aware of why the practical career guidance and counseling needs of noncollege-bound youths have not yet been met. The many suggested solutions vary depending on the position from which one writes and no one solution is even close to attainment.

Public policy-makers in career education are increasingly emphasizing provision of work qualifications for youths by the time they leave secondary school. Youths' need for specific occupational skills, those qualifying a person for immediate employment on leaving secondary school, are stressed. This is the first of six elements that constitute the diverse recommendations in the literature about what practical career guidance and counseling should be.

A second element of the diversity relates to the stress that career and vocational development theorists place on the imminent occupational choice as only one of several choices that a person makes in his career. A person's continuing integration of choices into a career requires (1) that he be taught to look inward to see outward better and (2) that he be helped throughout life to exercise vocational skills that enable him to remain continually in employment and to attain career satisfaction with the assistance of that employment.

Career theorists with this emphasis single out education and work choices without regard for the other choices that the authors include in their meaning of career.

The third puzzle element is contributed by manpower economists who suggest that everyone have an occupational skill when he leaves secondary school and who cause counselors concern by advocating special vocational rather than general solutions to career development through career education. This latter point points up the fourth element of the diversity puzzle, which
consists of the views of counselors and their educators on career development in career education. Counselors and counselor educators agree that noncollege-bound students need practical vocational guidance services. Counselors also wish to help provide those services. However, counselors know that youths have other needs that must also be satisfied. Counselors therefore find themselves torn between national need and its satisfaction by vocational means and individual need and its satisfaction by counseling on a life career basis.

The fifth element of the diversity puzzle emerges from student reports on their needs. Students indicate that they are now receiving the educational and personal guidance they want; however, they also recognize that they need more and different vocational guidance than they now receive. School administrators believe that state employment services should cooperate in providing and supporting needed vocational guidance, particularly placement of school dropouts. The vocational development theory emerges in this connection emphasizing the fact that the student's parents and friends figure heavily in his vocational orientation and immediate employment on leaving school. This stresses the fact that career development must find expression in schools in a context as wide as career education rather than narrow occupational information and placement monitored only by counselors.

Finally, the sixth element of the puzzle consists of noncollege-bound students. Noncollege-bound students in particular need practical career guidance services. However, noncollege-bound students represent only a special form of development in the general theory of career development. In separating noncollege-bound students from other groups, the public desire to provide immediate and effective services to noncollege-bound youths tends to compete with general improvement of career services through better representation of career, rather than vocational, development theory.

Subsequent chapters treat the elements of this puzzle more fully; however, the principles of synthesis, which lend meaning to the key words of the realignment hypothesis, are discussed first in the next section.

e. Principles of Synthesis: Meaning of Concepts

Synthesis of the literature on career guidance and counseling is difficult because of the different viewpoints of authors; however, major principles of synthesis may help readers toward their own synthesis.

1. A first principle of synthesis in this review has already been presented. In considering the sixth hypothesis, the authors attempt to draw together the conclusions and recommendations based on the first five hypotheses to help the reader synthesize for himself the realignment of practical career guidance and counseling since 1968 as well as report what the literature says on the topic.

2. A second principle of synthesis in this review relates to the different meanings of "career" that exist in the literature.
"Career" is viewed by many only as an effect realized in the life of an individual. In reality, however, career rests in the individual and the situation as both evolve together. However, the literature sometimes emphasizes the person gaining realization of his career and at other times emphasizes the situation that dictates what the individual must do or be.

Career is sometimes discussed in the literature in terms of career development. In this literature, recognition is given to the individual in a context of life situation. Attention is focused on the evolving perspective that the individual achieves as he comes to understand his identity within his experience as well as his responsibility for his own development.

Career is also treated in the literature in terms of career education. In this literature, attention may or may not be given to career development as the object of career education.

Finally, career is discussed in the literature in terms of practical career guidance, counseling, and placement functions. In this literature, attention may or may not be given to the concepts of either career development or career education as superordinate to career guidance, counseling, and placement functions.

The authors or this review believe that career encompasses all possible patterns of personal choice related to each student's total life style. The content of career education programs should therefore emphasize helping youth set and realize goals in the areas of: (1) occupations, (2) education, (3) personal and social behavior, (4) learning how to learn, (5) social responsibility, and (6) leisure activities. Those programs that deal only with educational and vocational choices, as is often the case when career is used in the narrow sense, promote an incomplete view of youths' development. Thus, when the context indicates that the authors are speaking for themselves, career is considered as an effect realized in the life of the individual that develops and through continuing career education is influenced by practical career guidance, counseling, and placement functions aimed at the areas of occupation, education, personal and social behavior, learning how to learn, social responsibility, and leisure.

3. A third principle of synthesis in this review relates to the term "practical."

"Practical" is viewed by many as easy or familiar; those who call for re-emphasis of practical career guidance and counseling in these terms generally yearn for maintenance of the status quo.

Practical is sometimes used to mean an action or policy that is known to work. In this regard, the term has a technological meaning and is frequently used in apposition to the term "theoretical."

Practical also refers to feasible activities; however, activities considered infeasible by those who cannot yet do them may still be practical for others.
Finally, some writers relate practical in this review to "...occupational information and assistance in relating abilities and interests to career options and specific skills training programs." (RFP 72-42, p. 2.) This definition equates practical only with the vocational areas of career and it does that rather simplistically, not in the detail that vocational development demands.

4. A fourth principle of synthesis in this review relates to the terms "guidance and counseling."

The literature sometimes uses the term "guidance" as if the wishes of another must become those of the guided person. Such use obviously ignores the self-initiated, self-directed, and self-corrected motivation that those who practice guidance and counseling work to instill in those they guide.

The literature sometimes uses guidance and counseling in different relationships to each other. At times guidance is the generic term, and counseling is used as the means by which guidance is achieved. At other times, the literature uses counseling as the generic term and considers guidance as a means to the ends of counseling.

The authors of this review use the terms guidance and counseling in ways that may differ from traditional uses. Guidance is the generic term, including instructional, counseling, placement, follow-up, evaluation, and support procedures based on individual planning and development needs of youths. Guidance signifies the total content and process of programs aimed at helping young people develop and protect their individuality and potential. On the other hand, counseling is the process that provides one alternative for helping youths achieve guidance-related objectives. In this process, counseling personnel (e.g., counselors, teachers, paraprofessionals, administrators, and school psychologists) interact with students individually or in groups to facilitate youth career development.

5. A fifth principle of synthesis in this review is that of both individual and system needs.

The authors of this review define a student's need as the discrepancy between his current and desired status. This concept of need indicates the direction in which the student wants to move. Therefore, need assessment should appraise where youths are rather than where the system is. System-oriented needs refer to institutional or organizational requirements such as the need for more counselors. Although these are important, their consideration is premature in the absence of identified individual needs. System needs become relevant when consideration is given to how student needs will be met.

6. A sixth principle of synthesis in this review is that of individual planning.

Although individual comprehension of personal needs is perceived as a major purpose of guidance counseling, the authors believe that individual planning is a major means of achieving this goal. Individual planning can best be understood in relation to the concept of career education.
should provide instruction and guidance tailored to each youth's personal characteristics, background or experience, needs, and career goals. Each student should repeatedly engage in individual planning, selecting his goals and planning activities to achieve them. School personnel should be available to help youths assess their potential and limitations, discover their needs, delineate personal short range and long range goals and related objectives, and develop a program of study to achieve each of their goals. Career planning and development are most satisfying for youths when they act on goals they have selected themselves or agreed on. Without individual planning, career education imposes society's goals on youths or confuses students by not informing them of the goals and objectives of their instructional activities.

7. A seventh, and final principle of synthesis in this review relates to the goals of practical career guidance and counseling for non-college bound youths.

The major goal of a person who provides career guidance and counseling should be to get students to think not in terms of attaining the counselor's goals, but in terms of evolving their own goals. The counselor's goal is to get students to compare their current experiences with their desired experiences. This process of comparing existing with desired experiences and thereby ascertaining one's needs, of individual planning to secure desired experience and of acting on that plan and its modifications, is purposeful action. It is self-initiated, self-corrected action directed toward satisfying individually known needs.

f. Method of Reviewing the Literature

The literature reviewed constituted a wide variety of documents. Literature with which the authors were familiar was augmented in several ways. First, using pertinent descriptions, standard indices of educational and psychological literature were searched. Second, a subcontract was let to the ERIC/CAPS Center, University of Michigan, to undertake a comprehensive search and provide an extensive bibliography of information relating to the review hypotheses. Third, a panel of experts in various career guidance, counseling, and placement areas provided other key documents that were not turned up by the other two searches. Fourth, documents were obtained from the directors of three comparable projects that either had searched or were searching for career education and guidance programs and materials. Finally, persons in the U.S. Office of Education and the Department of Health, Education, and Welfare were consulted for additional suggestions.

The authors identified, read, and abstracted more than 350 significant documents related to the literature review hypotheses. These documents were screened from a larger number of potentially significant publications. They included such documents as proposals, final reports, progress reports, curriculum guides, journal articles, convention papers, newsletters, books, tapes, and personal communications. The focus of the review was on documents produced after 1968, but critical material generated before this date was considered to some extent.
Chapter 2

CAREER NEEDS OF SPECIAL STUDENT GROUPS

1. WOMEN, MINORITY STUDENTS, AND STUDENTS FROM LOW INCOME FAMILIES HAVE NOT OBTAINED OCCUPATIONAL INFORMATION AND ASSISTANCE IN RELATING THEIR ABILITIES AND INTERESTS TO CAREER OPTIONS AND SPECIFIC SKILLS TRAINING PROGRAMS.

Hypothesis 1 states that "women, minority students, and students from low income families" should be considered. In attempting to examine the needs of these three disparate groups as they are treated in the literature, considerable overlap was discovered in the discussion of the needs of students from low income families and those from minority groups. The literature often discussed these two groups in combination. However, minority students have needs that are not related to economics. There are also special groups of low income students who are not from racial minorities; for example, many of those living in Appalachia.

Although the general category of "minority students" can be divided into subcategories, reflecting the emphasis in the literature at large, the following racial minority groups will be emphasized in this section: Negroes (Blacks), Spanish surname (Mexican-Americans, Chicanos), and American Indians (Native Americans). In the literature, Puerto Rican students are often grouped with Mexican-Americans in terms of cultural variables (Spanish-speaking students) or with Blacks in terms of sociological or environmental variables (inner-city disadvantaged). Puerto Rican students will be mentioned only when an article deals specifically with this group.

Little information was uncovered in the literature regarding the special guidance needs of Asian students. Such needs exist, but since references to them appear so infrequently in the literature, needs of these students will not be stressed.

Women students constitute perhaps the largest "minority." Their career guidance needs are treated on a general level and as they overlap those of students from either minority groups or low income backgrounds.

The hypothesis implies that three variables of practical career guidance should be discussed: (a) information on personal characteristics, (b) information on occupational opportunities and training, and (c) assistance to students in relating these two types of information. For each of these variables, the approach here is to discuss what services are recommended and what services are generally provided to each group of students. Also, an attempt is made to discuss issues that apply generally to all three groups (women students, minority students, and students from low income backgrounds) and to highlight issues that are of particular importance to each specific group. The reader should remember that all groups treated in the literature are heterogeneous, and many members of a group do not exhibit the characteristics described as representative of that group.
a. Information on Personal Characteristics

An individual's possession of information on his personal characteristics involves self-knowledge, which virtually all authors find essential for career development. In addition to interests and abilities, the literature highlights such personal characteristics as an individual's self-concept and his cultural background (family structure, patterns of communication, and so forth).

(1) Assessment Instruments

A major topic highlighted by the literature consists of tests used to assess personal characteristics. The tests used by school personnel to assess students' interests and abilities must be at least valid and reliable; however, many authors believe that this is not the case when they are used with the groups in question. There seem to be three basic issues: (1) On what group were the tests standardized and is that group comparable to the group in question? (2) Is the test measuring a characteristic that the individual has had a chance to develop? (3) To what use are the results of the test being put?

The first issue is extremely important in counseling women and minority group students. Wolfe (1972) states it is difficult to use devices based on men's vocational interests to differentiate women's interests. Cole (1972) of the American College Testing Services reports that vocational interest inventories that are constructed primarily for use with men are commonly used to assist women in making career decisions. She points out that while present interest inventories frequently include women's occupational scales, those scales are limiting because they provide information only on those occupations that women have entered in large numbers in the past, that is, traditional women's occupations. Schlossberg & Goodman (1973) are highly specific regarding their concerns about the Strong Vocational Interest Blank (SVIB). They feel that the SVIB limits the choices for both sexes by listing 37 occupations exclusively for women and 33 occupations exclusively for men. They also deplore the fact that in the SVIB the occupations exclusively for women are frequently those of lower status and therefore of lower salary. Campbell (1973) in responding to Schlossberg & Goodman states that as of April 1973 there will be a single SVIB version designed for use with both men and women.

Present appraisal instruments are questioned when they are used on groups outside the dominant culture. There is considerable feeling that tests standardized on middle-class whites are inappropriate for use with ethnic minorities. Holloway (undated) explicitly states that there is a need for development and use of more valid methods of appraising the intellectual potential and creativity of minority groups. Thomas (1972) feels that standard measurement techniques do not reliably and effectively deal with Black uniqueness. She urges counselors to find measures that will not damage Blacks and to develop their own reliability measures for the techniques that they use. Sifuentes (1968) denounces all tests and states that intelligence and achievement potential must be determined by human beings rather than instruments.

The second major issue raised about appraisal methods is that many individuals on whom they are used have simply not had the opportunities to develop that which is being measured. The issue is most frequently raised with respect to interest inventories. Washington (1968) states that interest tests are not
valid for young people who have grown up outside the mainstream of American life, and Vontress (1971a) argues that many Blacks have not had the experiences necessary to develop the interests measured by tests. He is particularly critical of the Kuder Occupational Interest Survey and the SVIB.

A third issue that results from concerns about valid appraisal of personal characteristics is the use to which these appraisals are put. Since many authors feel that the tests are invalid, they argue that it is unwise to emphasize their results. Yet as Cole (1972) and Berry, Kern, Meleney, & Vetter (1966) point out, interest tests are often used to channel women into traditional occupations. As Casso (1972) notes, many Mexican-American students are placed in classes for the mentally retarded on the basis of test scores, when in fact their low scores result only from difficulty with English. He states that in California a disproportionate number of Mexican-American youths make up the 75,000 people classified as needing education for the mentally retarded.

Williams (1970) stresses that there is an erroneous equation between IQ and intelligence and that this error leads to the false conclusion that Blacks are inferior to whites. Responding to similar feelings, the Association of Black Psychologists has called for a moratorium on the use of conventional tests such as the Stanford-Binet (Form L-M), the Wechsler, the Scholastic Aptitude Test, the Stanford Achievement Test, the Iowa Basic Skills Test, the Graduate Record Examination, and the Miller Analogies Test. A somewhat more moderate alternative is expressed by Wendell Rivers (1972):

It is unfair to assume that black and white cultures are so similar that the same tests can be properly used in psychological and educational testing and placement. Since ability tests tend to favor the white and middle class, thereby penalizing low status blacks (as well as low status whites), it is now incumbent upon black psychologists to develop:
1. intelligence tests which select items from the black culture for representation on ability tests;
2. tests that are drawn entirely from the black culture; and/or
3. validate minority group responses to middle class oriented tests. (p. 94)

In line with Rivers' thinking, efforts are currently under way at Washington University under the direction of R. L. Williams to develop "A Black Intelligence Test of Cultural Homogeneity" (BITCH). Williams and his staff hope that this instrument will provide a more valid assessment of the intelligence of Black youth.

(2) **Self-Concept**

A positive self-concept is a personal characteristic that the literature indicates all students, especially the groups emphasized in this chapter, must have to evaluate their potential realistically. Washington (1968) suggests that the level of aspiration rises with the level of understanding and faith in the self, thus arguing that the main goal of the counselor should be to help students improve their self-image. She also reports that the disadvantaged girl does not know who she is, what she can do, or what she wants to be. Many authors agree with Washington and feel that the groups being discussed have
negative self-concepts. Women's attitudes toward themselves and other women are partially revealed in a study conducted by Goldberg (reported in Hawley, 1973). Goldberg presented a group of women with a scholarly article. One-half of the women were told that a man wrote it and the other half were told that its author was a woman. The women who were told that the author was a man rated the article higher in excellence than the women who were told the same article was written by a woman.

Banks (1972) states that the racist attitude of Black inferiority has been accepted to a large extent by the Blacks themselves. Rosenthal, Weissberg, Ladd, Gilbert, & Bruce (1971) conducted an extensive study of Black seventh and ninth grade boys and concluded that Blacks need a strong and positive sense of Black identity. Grier & Cobbs (1968) stress another factor that contributes to the lack of positive self-concept for Blacks--a lack of pride in their culture. This point is discussed further in the section dealing specifically with minorities.

The lack of a positive self-concept is a frequently observed characteristic of the rural poor (Sweeney, 1971) and especially of Appalachian youth (e.g., Hansen & Stevic, 1971; Norman & Flanders, 1971). A reported lack of motivation and a sense of determinism or resignation, cited as hindrances to his success, is attributed to the Appalachian student's geographic isolation. As stressed by Hansen & Stevic, a primary task of the counselor working with rural poor is to increase student motivation and to help students develop a positive self-concept. A specific strategy that has been suggested (e.g., Casso, 1972) relates to the issue of appraisal methods: Counselors should not classify minority students or other isolated individuals as intellectually defective on the basis of tests, thus avoiding damage to their self-concepts.

(3) **Sense of Agency**

The importance of helping the student have a sense of agency is a theme that parallels that of developing a positive self-concept. A sense of agency is defined as an individual's perception that he can affect his life and what happens to him. It is the direct opposite of the sense of determinism and resignation mentioned above. Osipow (1969) strongly believes that the disadvantaged student needs help to perceive himself as a person who does things, is capable, and has competencies. He indicates that this help would lead to improved motivational levels and reduced work-related fear and aggression. Berry et al. (1966) imply that a sense of agency is what women need when they state that women must be encouraged to engage in total life planning with an awareness of the necessity for action and of the choices available to them. Herr & Cramer (1972) indicate that a sense of agency is the greatest need of Appalachian youth.

(4) **Decision-Making Skills**

The literature further reveals that a sense of agency can best be implemented when a student possesses decision-making skills. As Herr & Cramer (1972) emphasize, the goal of vocational guidance should be to provide students with data and tools for vocational decision-making. They believe that the major criterion for judging the effectiveness of counseling should be the ability of counselees to make "good" decisions. However, because each individual is unique, his choices will be unique; what is a "good" decision for one
student may not be "good" for another. The student therefore should be given assistance in the decision-making process. Counselors must not force specific decisions.

Many other authors including Tyler (in Whitfield & Gustav, 1972) and Ryan (1971) urge that decision-making be emphasized. Rosenquist (1969) administered a survey to more than 4,000 junior and senior high school students and concluded from the data that students are interested in the decision-making process. The students surveyed expressed interest in the forces that influence their lives, and wanted to receive information that would be useful to them in decision-making. In addition, many educational programs designed around a problem-solving, decision-making model have appeared recently. For example, Adkins (1970) describes the Life-Skills Program based on a four-stage problem-solving model which was developed for disadvantaged youth from the Bedford-Stuyvesant area of New York City.

The discussion of personal characteristics (self-concept, sense of agency, and decision-making ability) and valid appraisal instruments relates generally to women, minority students, and students from low income families. However, certain additional issues relate to the personal characteristics of only one of these groups. These issues are discussed below.

(5) Personal Characteristics Information Specific to Women

The role of women is changing rapidly in American society. There is fairly unanimous agreement that most women of the future will work. In a brief article entitled "A Continuing Battle Defining Woman's Role" (Impact, 1972), the staff of the ERIC Counseling and Personnel Services Information Center concludes:

The battle about the appropriateness of this goal [preparing women for the world of work] continues, but it is superficial, for the direction seems to be pre-determined. Good or bad, right or wrong--the girl in the future will be working. (p. 56)

A recent study by Rand & Miller (1972) reveals that more and more girls in school today are selecting plans that entail working most of their lives while combining career, marriage, and motherhood.

As far as women's attitudes toward working are concerned, there is evidence of remaining opposition to working among women themselves. Almost all authors agree that sex stereotyping takes place early in a child's life and continues throughout life. Bernstein (1972), for example, says that children internalize their stereotypes about sex roles long before they enter public school. Schlossberg (1972), Bem & Bem (1972), and others imply that this stereotyping has led women to believe that it is unfeminine to work; consequently they are afraid of achievement in a career. To counter these feelings, Hawley (1972) recommends that careers for women be portrayed as vehicles to an exciting life, as opportunities for self-expression, and as appropriate to implementing a feminine self-concept.

Some authors (e.g., Haener, 1972) suggest that women's uncertain feelings about working may be because they are combining the roles of worker and mother,
and they have some guilt because they are not home with their children. Children definitely seem to affect the career pattern of women since many women have what has been called a "discontinuous" work pattern. This pattern is characterized, as Herr & Cramer (1972), Zytowski (1969), and others point out, by entry and reentry into the labor force. A woman frequently leaves the labor market when her children are very young and reenters it when they begin school. The U.S. Department of Labor (1971a) is aware that discontinuity is characteristic of many women's career patterns and recommends that women students be encouraged to recognize and plan for this possibility. Simpson (1966) indicates that the present trend toward smaller families may affect women's entry and reentry into the labor force in that it will shorten the period of time during which they do not work.

The combination of marriage and career is apparently emerging as a new way of life. For some women, however, particularly those from minority groups, this combination is not new since they have been combining careers and marriage for many years. Washington (1968) states that many disadvantaged women have worked solely for monetary return at any job they were able to obtain; they need to learn that work should relate to their interests and talents and should be personally satisfying. The fact that women are working from preference rather than necessity and the need to help them relate their personal characteristics to occupational choice may be the most significant considerations for women's career guidance services at present, resulting in the developing concern with helping women plan to enter the work force and to combine the roles of worker and homemaker.

There appears to be a new realization that the guidance needed by women requires a distinctive career development model. Thus as Berry et al. (1966) report, counselors must encourage women to engage in total life planning. Women must consider more than the traditional topics of vocational aptitude and interest. Eyde (1970) agrees, stating that women must also consider and recognize how children and a family may affect their career. Related to planning for a life that combines work and motherhood is the suggestion from several authors (e.g., Schlossberg, 1972; Berry, et al., 1966) that traditional sex roles within the family will become more blurred and inevitably the responsibilities of family members will be more alike.

(6) Personal Characteristics Information Specific to Minority Students

(a) Health Concerns

For many minority youths, the literature shows that health characteristics are of major concern and that these students often lack an adequate appraisal of their own health. In a recent survey by Mason entitled the "Major Concerns of Black High School Youth" (1972), conducted in Washington, D.C., a large percentage of students expressed concern over sickle cell anemia. They wanted to know more about the disease and whether they had it. A report on the Mayor's Youth Employment Project in Detroit (1965) showed that in a screening of 159 trainees enrolled in the program, 62% showed symptoms requiring further examination and 63% were found to be in need of extensive, immediate, and long term medical services. This same report indicates that the dietary habits of the group were far below that considered "normal" by a nutritionist, and 59.8% of all referrals had health problems that could be
traced directly to inadequate diet. Similarly, a report from the Work Opportunity Center Health Services in Minneapolis, Minnesota (1971) revealed that 50% of the students in the program needed dental work. Many authors (e.g., Sweeney, 1971; Menacker, 1971; Vontress, 1971a) feel that minority youths and youths from low income families must know their health status since health problems may prevent these individuals from obtaining employment, hinder their success in training programs, or reduce their motivation to obtain employment or achieve success in training programs.

(b) Cultural Concerns

Particularly for minority students, self-understanding necessarily entails an understanding of their own culture, the dominant culture, and how these two relate. Differences in the two cultural systems must be understood. There is evidence that minority students are being acquainted with the dominant culture in school, but that discussions of their minority cultures are lacking. For example, Sifuentes (1968) states that politicians, educators, policymakers, and administrators have ignored the need to teach Spanish, Mexican history and culture, and the true history of the Southwest. Many authors urge that special "Black Studies" and "La Raza" courses be provided--particularly for minority group students, but for all other students as well. The U.S. Commission on Civil Rights (1972), in a publication entitled "The Excluded Student," severely criticizes the omission of Mexican-American history, heritage, and folklore from the classrooms of the Southwest. The Commission recommends that textbooks, course materials, and school activities be amended to be more relevant to Mexican-Americans. Bryde (1971) indicates that a course on Indian culture should be taught. Besides helping to develop self-understanding for Indians, the course would motivate Indian students to learn other subjects. Concern with providing special courses on minority cultures is reflected in the many bibliographies that have appeared to identify student materials that could be incorporated in such courses. The selected bibliography on Ethnic Minority Cultures (1972) produced by Northwest AMIDS (Area Manpower Institute for the Development of Staff) is a good example.

Rousseve (1971), in an article on counseling Black students, is concerned about placing too much emphasis on culture appreciation courses:

Approaching the question of personal identity by becoming exclusively involved with one's forebears is, in my view, not fully defensible. Identity is an active process derived from interaction with one's environment. It entails awareness, problem solving, and trying out alternatives. (p. 338)

Clark (1969) amplifies this concern:

You cannot give pride to an adolescent who is four or five years retarded in reading, understanding, and using English, by trying to teach him Swahili language or African tribal music. As a psychologist I consider this a paranoid pride without any basis in reality. Pride comes from the ability of the individual to deal with the demands of his environment competently and competitively. (p. 9)
In addition to indicating a need for a student to develop pride in his culture, the literature indicates that he needs to be aware of possible conflicts between his culture and the dominant culture so that he will not be overwhelmed by them. With this awareness, he will be better equipped to determine appropriate ways of dealing with these conflicts. Some of the potential conflicts that are highlighted by the literature are discussed below.

The American Indian, Puerto Rican, and Mexican-American cultures are described as espousing values that are contrary to the dominant culture's emphasis on competition (e.g., Aragon & Ulibarri, 1971; Bryde, 1971; Farlow, 1971; and Walz, Miller, & Mintz, 1972). It is pointed out that individuals from these cultures feel committed to a group and do not feel comfortable in individual competition. Peterson (1971), in describing a model of the individual in cultural change, suggests a strategy to integrate these conflicting values. He suggests that counselors arrange visits for students to situations where people work for a company, yet are rewarded for individual achievement.

A cultural characteristic that is related to being noncompetitive is the American Indian's respect for sharing and generosity (Bryde, 1971; A talk with some Native Americans., 1971). As Walz et al. (1972) point out, the Indian culture places little value on material acquisitions. Bryde (1971) indicates that Indians perceive the rendering of services such as education and hospitalization as "the right order of things" and consequently have angered individuals in the dominant culture by not displaying appropriately appreciative responses.

A characteristic of many Black families is that they are headed by females; thus they have been termed "matriarchal." Although acknowledging the fact that Black women make the major decisions in their families, Staples (1970) feels "matriarchal" is an unfortunate term because it implies female dominance over men, which is not the case. La Rue (1970) recognizes that the designation of "mother-head" and "father-head" doesn't imply inferiority of one and the superiority of the other. They are merely arbitrary role distinctions which vary from culture to culture and circumstance to circumstance. (p. 39)

However, she states that the Black woman is placed in conflict because an attempt has been made to make her feel ashamed of her strength.

Smith, Hernandez, & Allen (1971) of the Trans-Ethnic Education/Communication Foundation highlight a potential culture conflict in the area of conception of time. They report that Blacks and Chicanos have a conception of time different from that of the dominant culture. In their words:

Most Americans, by which is meant white Americans, look on time as a commodity which if properly used, will bring in money. Our language shows this commercial concept of time. When someone is behind schedule, he wants to "make time," if you "lose time," you can try to "buy time" by engaging in "time-saving" activities. (p. 18)

The authors argue that many Blacks do not value time as whites do and are less concerned with making every second "count." This attitude may bring them into
conflict with the dominant culture, especially in work situations. The authors also indicate that Chicanos may be more relaxed about time than Anglos. Walz et al. (1972) conclude that Mexican-Americans have a present time orientation as a result of growing up in a culture which stresses being rather than doing. However, Smith et al. (1971) feel that the Chicano's conception of time "is related to social conditions, instead of strictly to cultural patterns." (p. 21.) Whatever the origins of the conception of time, it seems clear that if individuals of different cultures are to interact without conflict, each must be aware of the other's conception of time.

Perhaps the most obvious potential conflict cited in the literature is that of differences in language. Although such difficulties are treated in detail in a later section, it should be noted here that many authors, including Anderson & Johnson (1971), Casso (1972), and Spang (1971), feel that students who come from cultures where a different language is spoken should have some knowledge of their English language ability and how it is likely to hinder or help them, especially in work situations.

b. Information on Occupational Opportunities and Training

The second practical career guidance variable that is inferred from the hypothesis is the type and amount of information on occupational opportunities and training that women students, minority students, and students from low income families do or should receive. There is unanimous agreement in the literature that students from these groups need information on the world of work. There are also many claims that it has not been provided to a sufficient degree. This view is held by many authors (e.g., Ginsberg, 1965; Mangum, 1971; and Ryan, 1971) and has also appeared as a major result in many studies.

(1) The Adequacy of Existing Information

Woodson (1969) examined minority youths' perceptions of the world of work by collecting data from junior high school students in an industrial urban community. The data revealed that students saw little or no relationship between what they were doing in school and their expressed occupational goal. They simply were not aware that people competed for jobs and that the best qualified person usually gets the job. In his study of the occupational aspirations of poverty-stricken Black students, Henderson (1971) revealed that the majority of students could not describe the training needed to achieve either their "ideal" or "real" occupations. He also found that considerably more middle-class youths than poor youths could name occupations closely related to their ideal and real occupations. Rosenthal et al. (1971) concluded from their study that schools do not acquaint Blacks with real opportunities or prepare them to take advantage of opportunities. Data on the job choices of these Blacks indicated that their first job choices were based on their aspirations, but they really did not expect to attain them, and that these students did not have the proper information on which to base job choices.
(2) Recommended Attributes of Information

The literature stresses that information on world of work opportunities for students must be accurate. Since it should be provided to students before they make actual career decisions, the information should be validated against current employment trends (Holloway, undated; Mangum, 1971; and Super, 1970). These authors contend that it is not sensible to prepare and encourage youth to enter jobs that rapidly become obsolete or for which the current supply of labor vastly exceeds available positions. The trends that students should be informed of should not, as Super indicates, be based solely on the employment outlook in the immediate geographic area. He points out that present career patterns are often discontinuous, entailing changes and adaptations to new types of work that require geographic mobility. Thus, he argues, the occupational information that counselors disseminate and the conditions for which schools need to educate and train these youth are those of both the home market and the export market.

Accurate information based on trends, however, is not sufficient to equip students for the world of work. Leonard (1969) says that unless an individual is aware not only of vocational opportunities but also of the procedures needed for goal achievement, he will be unable to take the necessary intermediate steps. The more an individual knows about all the factors entailed in entering a career, Leonard proposes, the more effective he will be in achieving that goal. In other words, the student needs to know how the occupational world operates. This seems to be what Gordon (1968) is advocating when he emphasizes that disadvantaged students need to understand the role of an employee and an employee's relationship to his boss. He also advocates that information be provided on how to apply for jobs, fill out application forms, handle interviews, and related factors.

There is considerable concern over sex-typing of occupational information and considerable evidence that sex-typing of occupational information occurs. Westervelt (1965), in an address to the Midwest Regional Pilot Conference sponsored by the Women's Bureau of the Office of Education, points out that occupational information describing the clerical field uses the pronoun "she," while information on the field of physics uses the pronoun "he." Westervelt believes that information about occupations should not reflect the sex of the worker, and she further stipulates that unimaginative literature on occupations should be kept out of the hands of students. By "unimaginative" she is reacting to a situation that Bem & Bem (1972) note—that women are given adequate information on only seven jobs: secretary, retail sales clerks, household worker, elementary school teacher, bookkeeper, waitress, and nurse. These authors are somewhat amazed that, in spite of American women's unique identities, the majority of them end up in the same occupational roles.

Bem & Bem's position is corroborated by the report of the Citizens Advisory Council on the Status of Women (1972) which indicates that more than one-half the women and girls in public vocational programs are being trained in home economics and one-third are studying office practices. The Council also analyzes widely used textbooks, finding evidence that women and girls are usually represented as passive followers of men and boys and that occupational roles for women and girls are limited to those of the traditional occupations mentioned previously. Because of this situation, many individuals
and agencies, including the U.S. Department of Labor (1971a), Eyde (1970), Hawley (1972), and Simpson (1971), urged that women be given occupational information on the entire range of career opportunities and that occupations not be presented in terms of only one sex. Some curriculum development work is under way that has a goal of updating and improving the occupational information that women receive. One substantial effort is the "Learning Opportunities Package on Women and the World of Work," developed as part of a career development project at the University of Minnesota (Thoni, Hansen, Klaurens, & Tennyson, 1970). Another women's career development project is the work of Vetter & Sethney (1971) on "Planning Ahead for the World of Work."

The above comments are directed to the problem of stereotyped occupational information, which the literature indicates is a particularly pressing problem for women. However, several authors note that students from minority groups also receive stereotyped information. As Chisholm (1972) points out, Black men are thought to be good porters, bus drivers, and sanitation men. Dickerson (1966) states that nonwhite workers are for the most part prepared to function only in jobs that are obsolete or obsolescent or in which the competition is extremely stringent. Relevant questions essentially concern the types of career role models presented to these students. Do texts portray minority group members in the professional and midsalary range occupations as well as in the ones in which they are overrepresented by race? Are women portrayed in occupational materials in roles other than the traditional ones? If the answers are no, and it appears that they are, the occupations about which women and minority students are both subtly and directly encouraged to think are limited.

This limitation points up other questions posed in the literature: How "realistic" a picture of the current job world should be provided to women, minority students, and students from low income families? Should these students be encouraged to challenge the existing situation if it currently is working against them? The literature is divided on this issue. Clayton (1972) says that counselors should let Black youths dream dreams that will encourage their development. He says that if counselors engage only in rational, predictable thinking with them, all kinds of possibilities are missed. He also indicates that frustrations faced by Blacks today can be traced to counseling based on such rational, predictable thinking. In line with Clayton's point, Bem & Bem (1971) feel that the counseling of women should not be realistic. They assert it is better to prepare a woman for a career that she may decline than to prematurely limit her capabilities. For Bem and Bem, the best counseling leaves open the largest spectrum of possibilities; thus students should be encouraged to dream and not be restricted to the existing situation.

The opposing point of view—that these students should be given a realistic appraisal of the options available to them and that many options are in fact closed—is represented by Rosenthal et al. (1971). They conclude that Blacks should know that much is closed to them since they are then better equipped for the world. They conclude that this will not discourage young Blacks as long as they have a strong and positive sense of Black identity. The fact that minority students have been encouraged to think more "realistically" than "ideally" was revealed by Kaufman, Schaefer, Lewis, Stevens, & House (1967). In their survey on the role of secondary schools in the preparation of youth for employment, they found that male Black graduates in
the nonacademic curriculum were more than twice as likely as any other group to report that they chose that curriculum on the advice of school officials. There was further evidence that, once these Blacks were in the nonacademic curriculum and they expressed an interest in training for a skilled trade, they were dissuaded. School officials interviewed in the study often reported that dissuasion was necessary because it was impossible to place Blacks in trades that require apprenticeship. Thus, there is evidence that the current practice is to give more realistic than ideal occupational information; however, the unresolved argument over the relevance of these approaches continues to receive considerable attention in the literature.

(a) Additional Factors for Women Students

The literature suggests that the information given to women students, in particular, must meet some additional criteria. First, erroneous myths about women workers, such as that women are absent from work more than men or less productive than men in comparable positions, must be corrected (U.S. Department of Labor, 1971a; Berry et al., 1966; Eyde, 1970; and Simpson, 1971). Second, the importance of women in the labor force should be emphasized to women students. Simpson (1971) declares that:

In a nation that has already achieved a trillion dollar economy, the contributions of women to the work force are absolutely essential. Full use of their talents and training should be made for the benefit of society, as well as for fulfillment of the individual. (p. 64)

She supplements her point with statistics revealing the trend toward a substantial increase in women workers as compared with men workers, particularly women workers who are heads of their households. She also stresses that women need to be made aware of the special options that are opening up that allow women to combine career and homemaking, such as day-care facilities for children of working mothers. Not only will this option free women for working, but improving day-care center standards will provide women with peace of mind concerning their children's welfare. Many authors urge that more of these facilities be developed. Berry et al. (1966) suggest that community agencies participate in establishing low cost day-care centers and work with schools to provide care for school children between the end of school and the end of the work day.

(b) Additional Factors for Minority Students

The literature indicates that information alone will not suffice for minority students. These students often have little vicarious exposure to work and they need actual work experience (Herr & Cramer, 1972; Gordon, 1968; and Spang, 1971). They need to be taken into job settings where they can observe and converse with workers. Many authors report that working role models are often not present for minority group students to observe and that the range of occupations that available working role models fill is frequently limited. Thus minority students lack what some authors call a "work orientation." Spang (1971) points out that Native American children need to gain broad experiences beyond those provided on the reservation. Knowlton (1971) points out that for children of migrant farm workers primary working models demonstrate a role that is diminishing with the mechanization of
agriculture. He believes that it is essential for these students to be given sufficient education to enable them to find employment outside farm work.

An additional point frequently made about world of work information for minority students is that they need to be informed about training and financial aid opportunities that are opening up to minorities exclusively (e.g., Traylor, 1966; Ryan, 1971; Holloway, undated; Kaufman et al., 1967; and Sweeney, 1971). Farlow (1971) produced a handbook for counseling Indians that has a fairly extensive list of educational and financial aid opportunities available to Indians. There is also considerable evidence that conferences and "opportunity days" have been planned solely for minority students. Another type of opportunity mentioned as important to point out to minority youths (Cappelluzzo; 1971) is the availability of health care facilities.

c. Assistance Needed to Relate Information on Personal Characteristics to Information on the World of Work

The third aspect of the hypothesis discussed concerns the nature of assistance that minority students, women students, and students from low income families should obtain to meet their unique needs. Counselors have some general goals for all of their students; for example, the typical counselor seeks to humanize the school experience for each student. He does this by facilitating goal setting and planning by individual students and by influencing the school curriculum programs in such a way that each student can pursue his own career goals. How these general goals of guidance relate specifically to the target groups delineated above is the focus of this section. The question to be treated here is: What must the counselor do, or understand, to help meet the needs of students in the specific target groups?

The literature indicates that there are two broad types of understanding that the counselor must have to work effectively with students from the groups discussed in this chapter: (1) he needs to understand prevailing biases (both his own and society's) related to these groups to understand individual students from each group better, and (2) he needs to understand the background and culture of each student to relate effectively to him as a unique individual. A significant component of each of these types of understanding is the counselor's appreciation of the student-client as an individual. The necessity to understand each client as a unique individual is expressed or implied by virtually all authors.

(1) Understanding Prevailing Biases

The first type of bias examined in this section is that of the counselor. Many authors indicate that counselors have allowed their biases toward minority group students to affect their interactions with these students. Dickerson (1966) states that

In the past and even today, school personnel have been guilty of judging nonwhites in light of the many stereotypes that cast them in the role of inferiors, incapable of certain accomplishments. (p. 123)
With respect to specific minority groups, Russell (1970) contends that counselors have biases that prevent them from treating Blacks as individuals. He provides many examples of how counselors have failed Black youths and he reports that Blacks see guidance as repressive, as an obstacle that students whose ambitions do not match the counselor's expectations must circumvent to accomplish their goals. Rodriguez (1972), in addressing the concerns of Chicano students, contends that American educators have the firm but false conviction that culturally and linguistically different students cannot and will not become successful learners. Rodriguez also accuses schools with a partial Black enrollment of placing too much emphasis on Blacks at the expense of other minorities. Aragon & Ulibarri (1971) stress that counselors' perceptions of Indian, Puerto Rican, and Chicano youths are frequently inappropriate and inadequate. They conclude that guidance counselors seek to avoid the task of assisting youths from culturally different backgrounds by concentrating on their negative attributes. Spang (1971) demands that counselors abandon their stereotypes of Indians and accept the reality of Indian life.

The literature also indicates that counselors have biased stereotypes of women. The Citizens' Advisory Council on the Status of Women (1972) reports that many counselors and teachers lack information on and sensitivity to the changing life patterns of women and to the widening vocational and higher educational opportunities for women that result from changing attitudes and equal opportunity legislation. Because of these lacks, Boyle (1972) stresses that teachers and guidance personnel need to revise their concepts of the basic facts and needs of a woman's life. Counselor attitudes and biases are reported (Eyde, 1970; Citizens' Advisory Council, 1972) to be discouraging girls from aspiring to nontraditional careers.

Counselors' biases toward women have been documented not only through professional or expert opinion, but also through two recent experimental studies. Thomas & Stewart (1971) conducted an experimental study to determine whether secondary school counselors respond more positively to female clients with traditionally feminine ("conforming") goals than to those with traditionally masculine ("deviate") goals. They found that counselors, regardless of their sex, rated conforming goals as more appropriate and rated female clients with deviate career goals to be more in need of counseling. Pietrofesa & Schlossberg (1969) studied the actual interviews of twenty-nine male and female counselors with a coached female counselee who said she was trying to decide between a career in engineering ("masculine") and education ("feminine"). The results revealed a significant number of statements biased against women entering the "masculine" occupation, and female counselors displayed as much bias as did their male counterparts. Pietrofesa & Schlossberg concluded that subtle pressures from and influences of parents, teachers, and counselors against entering so-called masculine occupations may do more harm than discriminatory practices of employers.

Since it appears that counselors are biased toward certain groups of students with whom they work, it is important that counselors be aware of their biases. Once the counselor recognizes his stereotyped expectations of persons from a particular group, he will be better able to discard them and recognize the full range of talents, interests, and values of each youth. Ratchick (1969), Barron (1972), Walz et al. (1972), and Farlow (1971) urge the counselor to recognize his own prejudices and attitudes. Stikes (1972) adds that the
A counselor must be willing to disclose them to his client. Holloway (undated) describes counselors who are most effective in working with minority youth. These counselors, in her opinion, have a clear and positive understanding of their own feelings toward minority youth, can honestly relate to these youth and establish rapport with them, are flexible and creative in their approach to counseling, and respect individual dignity and worth. Tolson (1972) states that counselors working with students from poor or minority backgrounds should continually question their own motives, examine their reactions, and analyze their ways of making judgments and decisions. Thus, they may avoid perpetuating the forms of social dishonesty that often exist in counseling situations but that are despised by poor and powerless minority groups.

Biases attributed to individual counselors generally reflect those prevalent in the dominant culture. Even if an individual counselor is free of such biases, he must be conscious of those in society to counsel effectively. The literature urges counselors to be cognizant of prevailing biases and stereotypes toward Blacks, Chicanos, Indians, and women, and it highlights two additional types of general societal bias that may be relevant to these target groups: restriction of potential roles and negative attitudes toward the nonprofessional working world.

Many authors indicate that counselors must recognize that society often places stringent limitations on the roles available to women and members of minority groups. For example, Simpson (1971) voices the opinion that cultural stereotypes limit the vocational opportunities available to women even though no difference in intelligence exists between men and women. Haener (1972) states that children are taught that the woman's role centers on the home and that if she happens to work, it is only to provide extra income for a wall-to-wall carpet. Although some women have been able to break into new roles, Hansen (1972) decries society's double standard, which requires girls to be more qualified than boys to benefit from job and college opportunities. The fact that Mexican-Americans are thought of mainly as good farm workers and Blacks mainly as porters and janitors is also documented.

Betz, Engle, & Mallinson (1969) point out a negative attitude in society toward the world of nonprofessional employment. This may have deleterious effects on the practical career guidance service available to women, low income, and minority students who do not plan on attending a four-year college or university. Other authors argue that occupations available to noncollege-bound students must be considered to be equally as worthy as more professional ones.

(2) Understanding the Background and Culture of Individual Students

The literature stresses again and again the fact that counselors need to understand the culture and background of their clients. A number of different variables of culture and background are identified as being particularly important, including: (1) family structure, particularly as it affects students' motivations and aspirations; (2) the role models available to students of the groups under discussion; and (3) differences in communication and expression patterns.
(a) Family Structure

Although the family structure of minority students and students from low income families is frequently quite different from that in the dominant culture, such differences are not documented here. This discussion of family structure relates to how these differences, whatever they may be, affect the manner in which counselors work effectively with these special student groups.

The literature devotes considerable time to discussing how differences in family structure affect student aspirations and motivations; however, the literature is highly inconclusive on this point. Some authors contend that the effects are debilitating on student motivation and others claim that there are no adverse effects. There are also differences in the degree to which authors feel it is debilitating. An extreme point of view is offered by Woodruff (1966), who expresses the view that many minority youths' lives are devoid of parental and adult guidance and parental affection, causing these youths to become underachievers in school and to display antisocial behavior. The majority of authors are much less critical. Spang (1971) avers that Indian youths receive little educational support at home compared with that received by Anglo youths. Rodriguez (1972) and Hansen & Stevic (1971) agree that for Mexican-American and Appalachian students, respectively, educational support from the home is not readily forthcoming, but they present some logical reasons for this. Rodriguez feels that many Mexican-American parents had unhappy school experiences, and their remembrances negatively affect their children's aspirations in school. In Appalachia, according to Hansen & Stevic, there is a strong sense of the family unit, and although parents want their children to have an education, they are afraid it will alienate the children from their families. Thus, it is argued that Appalachian children receive mixed messages about school from their parents.

Other authors feel that the family structure of these students has no adverse effects. Representative of this point of view are Anderson & Johnson (1971), who report little difference between Mexican-American families and other families with respect to the amount of emphasis on education that the child experiences, and Henderson (1971), who reports that lower socioeconomic class Negro youths are encouraged to attain middle class goals, including educational success, by their parents.

(b) Role Models

One clear effect of the differences in family structure is the difference in role models that are presented to the youth. Differences in the types of role models presented can also be attributed to the socioeconomic milieu in which these families exist. There is consistent agreement that authentic and believable role models are essential for minority students (e.g., Herr & Cramer, 1972). The issue is not that these youth are completely devoid of role models, since some models undoubtedly are available. The concern is that the range of models available to them is too limited. The literature also indicates that women lack role models that demonstrate a sufficiently wide range of attitudes, goals, and behavior.
The U.S. Department of Labor (1971b) reports that more than one of every four families of minority races was headed by a woman in 1970 as contrasted with less than one of ten among white families. This fact has the effect of limiting the number of working male role models available to these youths. Many authors, including Walz et al. (1972) and Sweeney (1971), feel that the lack of occupational role models is a debilitating factor for these students. Others (e.g., Peterson, 1971) point to the importance of exposing these students to a variety of occupational role models so that they obtain a sense of the many alternatives available. However, role models are important for minority youths in ways other than providing examples of occupational alternatives. Rosenthal et al. (1971) conducted a longitudinal study of Black seventh and ninth grade boys and confirmed the hypothesis that for males, the availability of male role models was positively related to self-esteem. Thus, since male role models appear to be important to minority youths by fostering self-esteem in addition to illustrating occupational alternatives, Clayton (1972) and Stikes (1972) urge counselors to encourage Black and other minority group professionals to serve as role models for students.

For many of the same reasons, a variety of role models is also important to women. Bem & Bem (1971) state that women desperately need a variety of successful role models. However, few young girls, particularly if they are also from a minority group or poor economic background, have opportunities to witness women functioning in an assortment of occupational roles. Most women are employed in only seven jobs (secretary, sales clerk, household worker, elementary school teacher, bookkeeper, waitress, and nurse). To rectify this problem, Hansen (1972) feels that the single most important step at the secondary level is to provide an opportunity for girls to discuss the ramifications of following traditional roles, combining a family and a career, or pursuing other life patterns. She suggests bringing girls (and boys) into contact with atypical role models such as female pediatricians, administrators, executives, lawyers, mechanics, and draftswomen. Correspondingly she suggests acquainting students with male nurses, physical therapists, and elementary teachers.

Encouraging women to come in contact with a variety of role models means that counselors must be cognizant of and support the emerging roles of women in today's society. Thus the National Career Information Center (1972) advises that counselors understand the changing patterns in women's lives and recognize the fact that changes have been taking place in recent years. For example, today there are eighteen women graduating from college for every one hundred women 21 years old in the population. In 1920 there were only two. Many authors (Lutes, 1971; Wolfe, 1972; and Bem & Bem, 1971) contend that counselors failed in the past to display an understanding of societal changes related to women. They either operated on the assumption that the career patterns of men and women are identical or counseled women into stereotyped roles of work and family that no longer reflect reality.

(c) Communication and Expression Patterns

Another fact that the counselor must recognize is that the communication and expression patterns of minority and low income students, especially minority students, are frequently different from those in the dominant culture. Many of these students are most fluent in a language other
than English, use a dialect substantially different from standard English, or generally lack basic verbal skills altogether. As discussed earlier in this chapter, lack of proficiency in communication in English may cause minority students to score low on intelligence tests. Other problems stemming from differences in communication and expression patterns are discussed below.

Walz et al. (1972) and Spang (1971) indicate that Indian students are placed at a tremendous disadvantage when they enter school because English is usually not their first language. The same is true of Chicano and Puerto Rican students. Rodgers & Rangel (1972) declare that not only do these students speak no English but also they often have trouble reading and writing in Spanish. Consequently, in the view of Rodgers & Rangel, they are often deficient in two languages. Carter (1970) does not agree with this analysis. He concedes that there is little doubt that the language (whether it is Spanish or English) spoken in Mexican-American homes in low socio-economic communities is indeed different from that spoken by "educated" people. However, he reports that rarely do studies of social class and language take the stance that educators have taken; that is, that language difference is a language deficiency. Carter feels that the language of Mexican-American children and the experience on which it depends are almost invariably perceived by English speaking school personnel as detrimental to school success. Consequently schools in the Southwest often prohibit speaking Spanish in school—a practice that can be inferred by Mexican-Americans to be a negation of their homes and culture. Conversely, Carter feels it can be strongly argued that speaking two or more languages enhances achievement and learning. Nevertheless, most authors imply that a working knowledge of English is a necessity for the child predominantly speaking Spanish if he is to get along in the dominant culture. As Galarzo, Gallegos, & Samora (1970) point out, the Mexican-American's lack of ability to speak English hinders his pursuit of an education and a job.

Black children are not faced with learning a different language per se, but it is well documented that Blacks frequently speak a dialect substantially different from standard English. Merier (1972) feels that many middle-class Black teachers and counselors along with their white counterparts need to be taught the "language" of their poor Negro pupils, but cautions that this dialect should not be given the status of an acceptable alternative to standard English. Williams (1970) disagrees. He feels that the Black community displays unique verbal skills that are valuable—but that simply have been rejected by the middle-class classroom.

The literature indicates that it is often difficult to establish rapport with many minority and economically disadvantaged students because of differences in language patterns. Problems also occur because the purposes for which language is used differ. Menacker (1971), Gordon (1968), and Sweeney (1971) note that many disadvantaged students use language to communicate signals and directions but not complicated emotions and thought processes. Such students are often not introspective and do not account for their behavior in psychological terms. Accordingly, many standard counseling techniques—including one-to-one interviews and non-directive counseling—are not effective. As Adkins (1970), Cappelluzzo (1971), Pollack & Menacker (1971), and others stress, a major reason why counselors and counseling programs are not effectively meeting the needs of disadvantaged youth is that they rely
heavily on nonstructured discussion methods as the primary means for helping youth resolve difficulties and make plans. These authors feel that this is unwise because these youths have a low verbal tolerance and find it difficult to sustain focused discussion on any topic.

(3) Counselors' Understanding of Prevailing Biases and the Background and Culture of Special Student Groups

The literature suggests three major alternatives for practicing counselors to use in acquiring an understanding of prevailing biases and the background and culture of special student groups: reading, first-hand experiences, and workshops (in-service training).

Extensive reading about these matters is frequently mentioned as an obligation of counselors and the least they can do to increase their effectiveness in working with special student groups. However, most authors feel that reading is inadequate by itself. Anderson (1966) states that counselors need first-hand contact with disadvantaged youths to understand them. Ratchick (1969) contends that there is no substitute for direct contact in learning about minorities, since such contact brings out hidden values, biases, and likes. Thomas (1972) offers an unusual perspective on acquiring understanding through actual experience. Her belief is that since Black counselors are not like Black students in that the counselors have gone through a white system, Black counselors must learn their job by actually counseling Black youths.

The third method suggested for counselors to acquire these understandings is through in-service training such as workshops. Recent examples of such efforts include a four-day intensive resident course offered by Educational Testing Service for counselors, teachers, administrators, school board members, and others concerned specifically with educational measurement and minority groups. This particular course and others with the same intention provide experiences designed to develop and encourage sensitivity in participants to the perspectives and lifestyles of minority young people. Among the specific topics and goals of this curriculum are:

- An examination of the uses, abuses, and misuses of tests
- Purposes of testing and kinds of tests used in assessment of minority adolescents
- An introduction to the planning, construction, and analysis of standardized classroom tests
- Competence in administering and scoring tests and interpreting test results to students, parents, school personnel, and prospective employers
- Ability to use and to teach others to use nontest data to supplement results of testing
- Familiarity with at least five major research studies on test bias and other issues relating to testing the disadvantaged
- Ability to work with other professionals (social workers, administrators, and so on) in explaining test results in a particular case
The Need for Backgrounds Similar to Those of Student-Clients

The preceding discussion of how counselors can acquire understanding is based on the assumption that counselors can gain this understanding on their own; however, this assumption is not agreed on by all authors. With respect to minority group students, a number of authors (e.g., Thomas, 1972) feel that the counselor has to be of the same racial or socioeconomic background as the student. Consequently, these authors feel it is futile for a counselor with a background dissimilar to that of minority or low income students to attempt to acquire such understanding.

Banks (1972) states that today’s counselors have no real understanding of what it means to be oppressed; they do not understand the multitude of adjustment problems that result from being nonwhite. Thomas (1972) feels that white counselors can never truly gain this understanding. In her view, which is a somewhat extreme but by no means solitary opinion, 100% of Black counselors’ time should be devoted to working with Black students and Black students should be counseled only by Black counselors. According to Thomas, white counselors must recognize their limitations in dealing with Blacks and not insult the Black struggle for respect by pressing to participate. Lindberg & Wrenn (1972) see a need for counselors who, by virtue of their skin color, language, or inner city origin, have inherent advantages in relating to minority youth. These authors report that an increasing number of minority students feel that they could relate only to a Black or Chicano counselor; consequently, these students would not initiate contacts with Anglo counselors. The authors also report that the few minority counselors employed in their school system had demonstrated their effectiveness by reducing racial tension in the schools.

Several Mexican-American authors agree that a student should be counseled by someone of his own background. Gonzalez, Maldonado, & Quintana (in press) state that the student who identifies strongly with the Mexican culture will often find it difficult to relate to an Anglo counselor. Accordingly, these authors feel that it is important to have Chicano counselors in the guidance department so that Chicano students will have someone with whom they can identify. By identifying with someone from his own culture who is also a functioning part of the dominant society, the Mexican-American student may be able to gain some insight into the two worlds in which he must live. Knowlton (1971) concludes that schools with substantial numbers of Mexican-Americans should be required to hire proportionate numbers of Mexican-American counselors and other personnel to serve as role models for Chicano students and to modify existing stereotypes in the minds of Anglo students and their parents. Although these authors stress the importance of the availability of Chicano counseling personnel, they do not imply that all Chicano students must be counseled by Chicano counselors. They believe that, for some students, this may be necessary to alleviate barriers in the white-Chicano counseling relationship, but with other students a white-Chicano counseling arrangement is possible although difficult. This latter point is made by Vontress (1970) in speaking of Black students:

Counseling Negro students presents more challenging problems than counseling white students because of their race, deprivation, and lack of academic skills prerequisite to success in schools which are geared mainly to meet the needs of middle-class white students. With the rise of Black
nationalistic sympathies and allusions, race differences in the counseling dyad may become an obstacle to effective counseling, but such an obstruction is not insurmountable.

Essentially, the problem is one of perception: how the counselor perceives the counselee and vice versa. When the counselee senses that the counselor is able, despite the obvious racial difference, to understand not only his special circumstances and problems, but to identify as well with him in his struggle to meet his emotional and material needs, the counselee and counselor can establish positive rapport with which many problems can be solved. (pp. 101-102)

Lewis (1969) similarly concludes that white counselors can effectively counsel Black students but they must be better than average counselors.

Other authors express the opinion that it is not racial differences that hinder the development of rapport between counselor and counselee, but rather dissimilarities in economic background and related experiences. Illustrative of this point of view is Rousseve (1971) who believes that the differences in social outlook attributed to the race of the Black population may more likely be correlated with socioeconomic class instead. Consequently, for the school counselor to function well, "he doesn't have to be the same color as the student client, but he should be in a position to deal openly and rationally with the realities of contemporary American life." (p. 341) Vontress (1971a) points out that many middle-class Black students accept the same values as middle-class whites. He and Lewis (1969) indicate that white counselors will be more successful in counseling Black students from the middle class than those who are more economically disadvantaged. Both these authors affirm the fact that similarity in socioeconomic background may encourage rapport more than similarity in race.

Nevertheless, most of the literature strongly urges that special efforts be made to recruit, prepare, and place minority counselors and instructors (e.g., Concerns and Recommendations: A Report of the Colloquium on Occupational Counseling and Guidance, 1972; Ratchick, 1969; and Hart, 1969).

(b) Aims of Counseling for Minority Students

There is another issue related to the assumption that counselors can work effectively with special groups of students by changing their approaches as mentioned earlier. Depending on the general aim of counseling for these students, such changes may not be necessary. One aim that obviates the necessity for acquiring the understandings mentioned previously is to assimilate the student into the dominant culture regardless of the student's cultural background. This aim is expressed by the Committee for Economic Development (1971):

We conceive education's role in this vitally important enterprise [opening up the doors of opportunity to those who have been denied an equitable share of society's rewards] to be the instrument by which the disadvantaged enter the mainstream of American life--the same unique role the schools played in the assimilation of the millions who came to this country in the great waves of immigrations. (p. 13)
Many students and authors feel that assimilation of minority cultures into the dominant culture is the primary aim of counselors and the educational system. The earlier discussion of the reaction of school personnel to students who do not speak English as their first language is one example of how this aim affects educational practice and policies. Further discussion of the goals of counseling related to minority students follows.

Deloria (1969) makes the point that, for more than 100 years, efforts have been made to get Indians to assimilate. A Puerto Rican youth quoted in "Puerto Rican Youth Speaks Out" (1971) states:

I think what we are all trying to get at is that there's an attempt to make Puerto Ricans assimilate; to make all minorities assimilate into American culture and that is what guidance counselors shouldn't do--and it's the first thing they try to do. (p. 92)

Peterson (1971) decries the fact that persons are too often told that they must disregard their original culture patterns and start anew with the Anglo middle-class system; Gunnings & Simpkins (1972) state that such an approach places the counselor in an undesirable, omnipotent role of determining what is best for the individual. Aragon & Ulibarri (1971) propose an aim for counselors and educators that is the direct antithesis of assimilation. They recommend that since the United States needs ethnic diversity to fulfill its national and international goals and to enrich the life style of the country, there is a need to develop educators in general and guidance counselors in particular who will reinforce cultural differences and promote mutual respect among diverse groups of people.

Other authors believe that counselors do not need to make special efforts to understand minority cultures because minority cultures must work out their own methods of coping with the demands of the dominant culture. Minority students do not need the assistance of counselors. This point is most strongly and eloquently made by Native American students (A talk with some Native Americans, 1971) and other spokesmen (Shroeder, 1972; Deloria, 1969). In Deloria's words:

The primary goal and need of Indians today is not for someone to feel sorry for us and claim descent from Pocahontas to make us feel better. Nor do we need to be classified as semi-white and have programs and policies made to bleach us further. Nor do we need further studies to see if we are feasible. We need a new policy by Congress acknowledging our rights to live in peace, free from arbitrary harassment. We need the public at large to drop the myths in which it has clothed us for so long. We need fewer and fewer "experts" on Indians.

What we need is a cultural leave us alone agreement in spirit and in fact. (p. 34)
A similar "leave us alone" point of view is expressed by some Black authors (e.g., Cleaver, 1969; Grier & Cobbs, 1968) as well as some Chicano (e.g., Sifuentes, 1968) writers.

Between the points of view that (1) the counselor must help the minority student to assimilate into the dominant culture and (2) that counselors should have little part in the development of minority youths lies a third point of view supported by another and perhaps the largest group of authors. In this one, the counselor would provide minority students with sufficient information to permit them to examine all ways of reacting to the demands of the dominant culture and then would allow each student to decide the way in which he wishes to operate. The final objective of counselors and educators, as expressed by Pollack & Menacker (1971), Walz et al. (1972), and Bryde (1971) is to help the student develop the skills necessary to function comfortably in the dominant culture while he remains a satisfied member of the culture of his origin. This viewpoint is stated very well by Gonzales et al. (in press):

We contend that a student is experiencing an identity crisis if he has accepted only one of the two cultures in which he lives. Most of our students are in a mental state of "limbo" because they have not, to any recognizable degree, been taught the contributions of their forefathers in the making of America. This has taught them to feel shame for their being and their culture. They have, in many cases, taken the only avenue open to them and have chosen to completely adopt the dominant culture, thus rejecting the culture of their forefathers. We feel that if he only accepts the dominant culture he consciously or unconsciously is rejecting part of himself, his parents, his grandparents and their existence.... We feel that the student must accept both cultures as part of his daily living with a free inter-flow of beliefs, values, and all the other controlling forces of one's own existence. (pp. 3 and 4)

(4) Extending the Counselor's Role in Working with Special Student Groups

(a) Implementing Environmental Changes

If the counselor is to provide necessary assistance to women, minority students, and students from low income families, the literature indicates that the counselor role must be expanded to include leadership in changing the school and the community environment. Beyond working effectively with youths from these specific groups, counselors must recognize the importance of re-orienting teachers, employers, community leaders, and parents from stereotyped ideas of what members of these students groups can and cannot do to attitudes that are not discriminatory. Counselors must acquire the needed skills for effecting changes and employ these skills diligently. Thus, the literature asserts that counselors must become agents for social change (Walz, in press; Gunnings & Simpkins, 1972; Gordon, 1968); they can no longer protect the status quo.

Thomas & Stewart (1971) state that as an agent of a public school system, the counselor is subject to many pressures to act not as an agent of
change but as an agent of conformity. Thus the counselor is caught between the theory of his training and the reality of societal demand. However, the literature indicates that counselors' professional organizations are beginning to accept the challenge to change students' learning and living environment when appropriate. For example, in their 1972 report on the American School Counselors' Association's 1965 recommendations of the functions that the school counselor should perform or cause to be performed, Herr & Cramer state that at least half of these can broadly be described as change-agent or environmental engineering functions in which the counselor is in contact with others to make changes in the student environment.

Menacker (1971), Ratchick (1969), and others point out that the counselor must be willing to effect change in the students' out-of-school environment. Occasionally, the counselor should be willing to arrange child care for an unwed mother, a job for a student, or food and clothing for needy students. This action-orientation is recommended to improve the lot of women students. A publication entitled "New Approaches to Counseling Girls in the '60's" (U.S. Department of Labor and U.S. Department of Health, Education, and Welfare, 1966) recommends that counselors improve conditions affecting women in our society. This recommendation is still being made by such authors as Bem & Bem (1971) and Haener (1972).

Authors make the same point regarding the counselor's work with poor minority youths. Tolson (1972) asserts that to be effective with youths from poor and ethnic minority backgrounds, counselors must exchange their role of maintaining the current status for one of working toward improved conditions for these groups. Banks (1972) outlines two opposing perspectives in the helping professions and social sciences: one supports the status quo; the other challenges the social system and is based on the hope for broad social change. Banks supports the latter while arguing for a new kind of professional who will actively deal with problems. Similarly, Tamminen & Miller (1968) conclude from a study of guidance programs and their impact that counselors can and should do something about the environmental factors that influence students. In their opinion, counselors should not deal with students only after they have been beaten by the environment. Rather they should do something about conditions that affect students as early as possible.

Many authors feel that the critical agent in the student's out-of-school environment is the parent. The literature strongly underscores the value of counselors' bringing parents into the guidance process (Rojas, 1966; Cappelluzzo, 1971; Betz et al., 1969; and Lutes, 1971). In Dickerson's (1966) words:

The non-white parent is in my opinion the key to a successful vocational guidance program for non-whites. His heritage of doubt, suspicion, lack of confidence, and the denial, by implication, of his existence is a powerful tool of opposition that must be reckoned with. (p. 123)

Rodriguez (1972) suggests beginning a counseling program with the "turned off and out" parents before their children are of school age and continuing during the child's school years. Anderson (1966) suggests that the counselor's day
must be more than the school day. Night office hours enable him to meet with the parents of the disadvantaged who work during the day.

The literature further indicates that changes to benefit students can and should be effected within the school as well as in the community. Carter (1970) argues that schools have been too quick to place blame on the home culture and relieve themselves of the responsibility to change. Menacker (1971) believes that the counselor must be willing to go beyond the one-to-one counseling arrangement and work to alter the school situation for students. Such changes might include removing a student from a class in which there is a personality conflict with the teacher, modifying a student's time schedule to allow for a shorter or later day, or providing for independent study.

(b) Fostering Research

To aid the counselor in effective performance of his role, the literature also indicates that the counselor must exhibit more concern with research. He must be willing to verify experimentally those techniques that do and do not work with special student groups. It is felt that this research will prove useful in an individual counselor's work, and he can inform other counselors of results.

One fault with the current situation is that most research on career development has been done with white, middle-class males. Consequently, the use of career development models based on these data is seen to be inappropriate for women and disadvantaged students (e.g., Wolfe, 1972; Stikes, 1972; and Bingham, 1972). The ERIC Counseling and Personnel Service Information Center recently conducted a survey of the research conducted on women ("A Continuing Battle...", Impact, 1972). It was determined that the most critical and most thoroughly explored areas were women's level of self-esteem, achievement motivation, and need to affiliate (meaning either marriage or the maintenance of some stable relationship with another individual). The issues relating to maternity and career were reported to be the second most highly explored. The survey indicated that research on women is increasing. This means that counselors will be seeing more reports of research that they may use to develop techniques for dealing with women students more effectively.

Guidelines for future research, particularly related to women and the disadvantaged, have been provided by the U.S. Department of Health, Education, and Welfare (1972) and the Committee for Economic Development (1971). HEW recommends that research to assess the current status of American women should be carried out on the following topics: (1) biological and social determinants of sex differences, (2) children's sex and social role development, (3) development and nature of women's self-concepts, and (4) achievement and achievement motivation in girls and women. The Committee for Economic Development reiterates that research is necessary to provide the background for developing effective methods for educating the disadvantaged. Research findings must be applied in developing demonstration projects that can serve as models for improving both neighborhoods and schools. Dissemination of research findings must be expanded, and full-scale programs must be established where pilot projects have proved valuable. Social and psychological research relating to the conditions for learning are both essential.
A caveat, however, has been stated by Williams (1970) on the value of comparative research. It is his feeling that comparative research encourages racist thinking and that it is more appropriate to look at the unique resources and strengths of each group than to focus on differences.

(5) Guidance Services Provided to Special Student Groups

In addressing the issue of services that have been provided to special student groups, many authors discuss the number of actual counselors in secondary schools. Almost all authors are dissatisfied with or point to inadequacies in the number of counselors available. Kaufman et al. (1967) in their study of secondary schools concluded that the primary reason for inadequate counseling was unrealistically high student-counselor ratios. Campbell's (1968) study revealed a median ratio of 380 students per counselor and reported that in most instances the counselor was greatly overextended in attempting to fulfill guidance service expectations. In that same year, the National Advisory Council of Vocational Education (1970) found that the ratio of counselors to secondary students averaged 1:510. The Council noted that whereas academic counseling services are available in nine out of ten U.S. high schools, vocational guidance is available in only five out of ten. The U.S. Department of Labor (1968) statistics are even more damning. Its statistics show that there are no school counselors in 13% of the nation's secondary schools and that only Massachusetts and the Virgin Islands meet the Office of Education standard of one counselor per 300 students.

Not only is there an inadequate number of counselors in total, but there is also a gross insufficiency of minority counselors. For example, the U.S. Commission on Civil Rights (April 1971) reported data from extensive surveys of Mexican-American education in the Southwest that reveal that there were 184 full-time Mexican-American counselors in the Southwest. This accounts for only 5.4% of the total counseling staff while Mexican-American students make up 30% of the Southwest's school population. Although the literature indicates that bias on the part of school officials is partially responsible for the situation, the lack of trained minority individuals to fill counseling positions also contributes to the problem (Lindberg & Wrenn, 1972).

Even when sufficient numbers of counselors are present and working with students of the three special groups, attention is often directed toward the college-bound within each group. Whitfield & Gustave (1972) recently edited a book that describes different stages in the development of girls into women and discusses the implications for counseling at each stage. The focus of the discussion is on helping women find rewarding careers and integrate the roles of homemaker and worker. Mathews wrote a chapter in Whitfield & Gustave's book (1972) on adolescent and young adult women that builds on the research of other authors. In it she made an interesting observation concerning the research that contributed to her chapter: the counseling literature seems to find career commitment in women unusual and, when present, mainly a characteristic of the gifted, talented, creative girl. Mathews is interested in the untapped potential of girls who are not likely to go to college.

Astin, Suniewick, & Dweck (1971) assembled and annotated a bibliography of articles on women from the professional literature. In the section
devoted to career choice, one finds reflected the trend identified earlier in Mathews. Nearly 60% of the references deal with gifted women who are college-bound, attending college, or employed in a professional occupation. Not only is there little evidence in the literature of counseling efforts on behalf of noncollege-bound women, but it also appears that counselors are receiving little direction from professional research on the career patterns of noncollege-bound women. This seems especially unfortunate, since, as Greer (1971) has indicated, it is the noncollege-educated working woman who is in greatest need of counseling assistance:

The concern of the liberal new feminist to see that her sisters are allowed keys to executive washrooms must seem bitterly irrelevant to those three-quarters of America's female population who have an income of less than four thousand dollars a year. Professional women are startlingly articulate and even powerfully represented, but the women who outnumber men in the service industries and the all-female class of servants in private households who earn little more than $1,000 a year are still awaiting their champion. (p. 122)

This emphasis on the college-bound is reported for all students, not only women. It is not only expressed as professional opinion, but it is also borne out by research with students. This research includes the use of data produced by recall of behavior, as well as attitudinal data. Kaufman et al. (1967) found that vocational students were least likely to discuss course choices or occupational plans with a guidance counselor. One-half of these students (compared with three-fourths of the academic students) remembered discussing courses. Only one-fifth of the vocational students recalled discussing job plans, while one-third of the academic students remembered doing so. Similarly, a study conducted by Purdue University entitled "Vocational Plans and Preferences of Adolescents" (1972) indicated that one of the ways in which students who expect to pursue college degrees differed from other students is that college-bound students report a much higher frequency of counselor contacts. While these contacts might be student-instigated, the discrepancy in the number of contacts nevertheless reveals that the noncollege-bound are receiving less counselor attention.

Attitudinal data collected from secondary school students point to a similar conclusion. Mallinson (1968) reported that the noncollege-bound had neutral reactions to their high school training, but the greatest dissatisfaction expressed by them was with the high school guidance program. Most indicated that counselors had little time for or interest in noncollege-bound students and failed to provide adequate vocational guidance information to them. Betz et al. (1969) in a study of noncollege-bound youths found that only 29% saw their high school experience as valuable and positive, 34% had neutral reactions, and 17% reacted negatively. The noncollege-bound students perceived the school counselor and other personnel within the school as favoring the college-bound population. Betz concludes that despite the insistence of counselors that they are performing educational and vocational counseling, they were not perceived as being at all helpful in assisting the employment-bound youth to make satisfactory vocational decisions. The counselors were perceived as not available, too busy, or too involved with the college-bound.
In general, with the exceptions of isolated programs, the literature indicates that noncollege-bound youths, particularly women, minority students, and students from low income families, are not receiving sufficient practical career guidance.

(6) Ways of Providing Practical Career Guidance

The literature discusses the ways in which counselors and others should provide practical career guidance to special student groups. Three ways are most frequently mentioned as described below.

First, practical career guidance should be introduced early, preferably in elementary school. Elementary school procedures are beyond the scope of the hypothesis but almost all authors indicate that if a student's first introduction to the world of work is in secondary school, valuable time has already been lost. It is felt that a career is not something that is only questioned or examined in the last years of high school; awareness of careers must begin early and evolve as the individual matures. This point has particular significance for women, minority students, and students from low income families since the literature indicates that these individuals need special assistance in thinking about themselves in relation to a variety of career options. Thus the introduction of career development in elementary school is proposed by many authors, including Herr & Cramer (1972), Mangum (1971), and Super (1970). The need for beginning career guidance early is perhaps most strongly stated by the Committee for Economic Development (1971):

The basic failure of contemporary urban life—-a failure that is real for most but greatly accentuated for the poor—-is the absence of a meaningful orientation of children and youths to the world of work. During the early years when his vocational interests should be kindled and his aspirations fired, the child all too often is not confronted by the life options that should eventually be open to him. Genuinely functional education uses work and other life experiences as laboratories in which young people find real problems and tasks that require learning.

Effective functional education requires the introduction of children to the world of work in the primary grades and a continuous infusion of job information and counseling throughout the school years. (p. 17)

Second, practical career guidance must relate to the basic skills of reading, writing, and arithmetic, and it should focus more on general, transferable skills than on job-specific skills. Sharp (1971), Ginzberg (1971b), and Super (1970) emphasize that while it is important to orient students of special groups toward work, the major task, particularly with respect to disadvantaged students, is to teach the elements of the "3 R's" that are basic to earning a living. The U.S. Office of Education's Advisory Council on Vocational Education (1968) expressed the opinion that orientation and assistance in vocational choice often constitute more profitable use of educational funds than specific skill training. This point was reiterated by the Committee for Economic Development (1971) when it advocated focusing vocational-technical education on transferable knowledge and skills rather than on specific manipulations that are rapidly outmoded. Although many authors recommend that emphasis be
placed on transferable knowledge, several of them indicate that students
who do not wish to commit themselves to one of the traditional vocational
education programs should also acquire a salable skill that will enable them
to obtain employment after graduation. Mangum (1971) developed a list of
operational principles for career guidance of the disadvantaged that includes
the following two points: (1) skill training and (2) no one should leave
school without a salable skill. Thus while stating that specific skill train-
ing is not of the highest desirability, he feels that all students outside
the college preparatory curriculum should acquire an entry level job skill
and also be prepared to enter a post high school vocational and technical
school.

Finally, counseling should take place in a situation that is not foreign
to the client and in which rapport can be established. The literature
strongly suggests that the best way to achieve this aim is to integrate
practical career guidance into normal classroom activities. This is advoca-
ted by those who feel that vocational planning and preparation must be at
the core of all education (e.g., Mangum, 1971; Traylor, 1966). Herr (1969),
in an address to the National Conference on Guidance, Counseling, Placement,
and Career Development and Educational-Occupational Decision-Making, states
that counselors must collaborate with teachers in accomplishing mutual
objectives. This point is reiterated by Gunning & Simpkins (1972) and Han-
sen (1972). Herr stipulates that counselors should monitor and diagnose
student progress and prescribe vocational guidance objectives. He believes
that these duties should be assumed in addition to those related to
functioning as a resource for teachers to promote their use of appropriate
occupational and educational information and career development concepts in
the classroom. Tillary (1970) assigns the counselors the responsibility for
including teachers on the "guidance team"; however, Campbell's study (1968)
indicates that this principle was not being fully implemented and also
highlights problems:

There was close agreement between teachers and counselors on the
guidance services in which teachers "could" and "do assist." Teachers reported that they "could assist" more than they are currently doing. At present only a small minority assist with specific services. To increase teacher involvement, at least two problems would have to be solved, i.e., the integration of class and guidance activities, and the development of classroom guidance materials. (p. x)

When teacher-counselor cooperation is more fully realized and materials are developed to make this integration possible, it is felt that education will be more relevant and useful to women, minority students, and students from low income families. An ancillary benefit of integrating career guidance into normal classroom activities stressed by a number of authors is that it will break the isolation of the counselor and get him out from behind his desk.

(a) The Value of Group Techniques

The literature emphasizes that a viable and desirable way of imple-
menting practical career guidance for special students is through group
techniques rather than one-to-one counseling sessions. Anderson (1966),
McJunkins (1966), Washington (1968), and Menacker (1971) generally espouse the usefulness of group counseling. Group approaches do not obviate the necessity for some individual counseling but are seen as a way of establishing rapport and providing the kind of peer support that students of special groups need. When common problems are discussed in groups, greater understanding and generation of more alternative solutions often result.

In dealing with the concerns of women students, group work with both males and females helps both sexes to examine existing barriers and stereotypes. For minority and low income students, the value of group work is predicated on the strong group loyalties that these students display (Pollack & Menacker, 1971; Gordon, 1968). Group techniques also are effective with these students because these techniques minimize reliance on verbal and abstract skill, which is characteristic of individual counseling (Farlow, 1971; Walz, in press). For example, the technique of role playing is frequently recommended since it capitalizes on the behavioral orientation of minority and low income students and can make use of mutual peer reinforcement.

(b) Paraprofessionals

The literature also points up the value of using paraprofessionals to provide practical career guidance to students of special groups. Four functions or benefits of paraprofessionals are summarized in the literature.

First, paraprofessionals can establish greater rapport with students. This point relates to the earlier discussion on the value of similarity in background and language between counselors and clients. The authors who indicate that paraprofessionals are useful because they foster rapport generally agree that such usefulness results from the fact that they are of the same racial group or economic background as the student (Thomas, 1972; McJunkins, 1966; and Pearl & Riesman, 1965). Pearl & Riesman also note that the hiring of paraprofessionals has the added benefit of creating new jobs for the poor. Farlow (1971) and Thomas (1972) suggest that minority students can successfully be trained as counseling paraprofessionals.

Second, paraprofessionals can perform an outreach function in the community, particularly to parents, because they can establish better rapport. This benefit is detailed by Cappelluzzo (1971) and by Pollack & Menacker (1971), who also point out that the traditional PTA approach has not been successful in involving minority and low income parents. Thus, as Knowlton (1971) states, paraprofessionals can perform a community liaison function.

Third, while they are in contact with parents and the community, paraprofessionals can secure relevant student data. Many authors (e.g., Menacker, 1971; Knowlton, 1971) specify a need for more reliable data on minority and low income youth and suggest that through informal research in the community paraprofessionals can secure relevant data on families and neighborhoods.

Finally, paraprofessionals can takeover many clerical jobs related to guidance and thus allow counselors to devote more of their time to the
tasks for which they were trained. Although this paraprofessional function does not relate specifically to students of special groups, the literature suggests that it is these students who are most neglected in terms of counselor time. Thus, making more counselor time available would make more assistance to them possible (e.g., Bowman, 1970). A more complete discussion of the role of paraprofessionals in career guidance is given in Chapter 6.

d. **Summary and Recommendations**

The literature reviewed in this chapter—the practical career guidance needs of special student groups—was divided into three sections of youths' needs: (1) information on personal characteristics, (2) information on occupational opportunities, and (3) assistance to the student in relating these two types of information. The literature summarized here suggests that the chapter's hypothesis should be accepted. The summary comments, findings, and recommendations are reported separately for each of these sections.

1. **Information on Personal Characteristics**

In discussing the information on personal characteristics that women, minority students, and students from low income families should and do receive, the literature is critical of the instruments used to assess personal characteristics. This criticism is leveled at the use of tests that have been standardized on white middle-class populations but then are used in assessing minority and low income students. Criticism was also made of the importance or weight that educational personnel and particularly counselors place on the results of assessment instruments.

In regard to the criticism of assessment instruments, the literature points out that some personal characteristics do not lend themselves to assessment by instruments but all students, particularly the subgroups discussed in this chapter, must be encouraged to develop them in their own unique ways. These characteristics are a positive and realistic self-concept, a sense of agency, and decision-making competence. Much of the literature addresses itself to the need for counselors to assist students in these areas.

With specific reference to minority group youths, there is general agreement that students should be helped to gain a full understanding of their own and the dominant culture and of the points at which these two may conflict. The physical health of these students is a personal characteristic that also must be dealt with since the literature indicated that a substantial number of minority group youths suffer from poor health.

For women students, the most significant finding was that a new trend is emerging in the role that women perceive for themselves. More and more women are combining a career and family by choice—for self-fulfillment—rather than out of necessity.

On the basis of the information reported in this section, the following recommendations are made:
1. Reliable, valid assessment measures must be developed and standardized on the target groups that they will be used to assess. The suggestion to rely on assessment by humans as opposed to instruments will probably not work on a large scale, because human beings are also subject to bias and partiality. Humans (primarily counselors) need to understand the strengths and weaknesses of the assessment instruments and to use them only as guidelines in assisting students to understand their personal characteristics.

2. "Good decisions" cannot be measured by other people's standards. Unfortunately in the case of many minority, disadvantaged, and women students, a "good decision" is perceived as one that has them conforming to situations completely foreign to them or one that reinforces the status quo rather than an individual's uniqueness. Counselors must allow students to make decisions that allow them to implement their unique potentials.

(2) Information on Occupational Opportunities and Training

Information on occupational opportunities and training is criticized for being inadequate in quantity and for being based on inaccurate stereotypes relating to sex and race. The literature points out the value of providing information based on employment trends. It indicates that since mobility is so characteristic of contemporary American life, it is essential that students receive information on occupational trends in the nation as a whole in addition to information on trends in their immediate localities. Descriptions should also be provided of how the occupational world operates—that is, the student should know how to go about getting a job in addition to what type of job he would like to obtain. With respect to women, the literature is adamant that myths about women workers must be dispelled. Women students should be encouraged to consider a greater variety of career options. In this regard women students must be exposed to female role models functioning in a variety of roles and working in a wide range of occupations. Similarly, minority students should be provided with a diversity of occupational role models.

The major controversy relating to this part of this chapter's hypothesis concerns the issue of how "realistic" information on occupational opportunities and training should be, particularly for minority students and women. Some authors insist that these students must be given a realistic picture of how difficult it is to surmount hiring and social barriers. Others insist that students must not be discouraged with this information and that they must aim for their highest goals.

On the basis of the information reported in this section, the following recommendations are made:

1. Minority, disadvantaged, and women students not only need information about the world of work, but they also need information on who is in the world of work; that is, they need to have role models to relate to and these models must not be portrayed in terms of racial or sexual stereotypes.
2. The experiences that these students encounter in secondary school must relate to their expressed goals. The school experience must not only provide students with the information described in this section of the report but also must demonstrate its usefulness to students.

3. The controversy over whether students with special needs should be given a realistic picture of the barriers facing them in society that might lessen their aspirations or whether they should be told to disregard those barriers and pursue idealistic goals is not so much a controversy as a paradox that must be dealt with in counseling these youths. Students with special needs must have high goals if they are to combat the fatalism that comes from living in this society; however, such goals must be supported by sound and realistic knowledge.

(3) Assistance in Relating Information on Personal Characteristics to Information on the World of Work

With respect to the assistance that students from the special groups should receive in relating information about themselves and career options, the literature enumerates some understandings that must be acquired by counselors; that is, counselors must understand prevailing biases (both their own and those in society) toward these groups and especially the background and culture of minority and low income students. The issue of whether counselors must have backgrounds similar to their clients is also discussed. Although some authors insist that similarity of race is essential for the counseling relationship, others argue that it is socioeconomic background rather than race that is the most important variable. The majority of the literature, however, indicates that although similarity of counselor and client, whether racial or socioeconomic, often enhances the counseling relationship, its absence is not insurmountable.

Indicating that counselors have been too few in number and have emphasized college counseling in the past, the literature also suggests how practical career guidance should be provided. Two approaches that are highlighted as being particularly valuable for these special student groups are group techniques and employment of paraprofessionals.

The literature points out that for women, minority students, and students from low income families, practical career guidance must be aimed at assisting them to maintain their unique identities while enabling them to function effectively within the mainstream of American culture. The literature further indicates that the focus of the counselor's efforts must go beyond the individual student into the dominant culture to effect changes on behalf of these students. Thus the literature urges counselors to be willing to implement environmental changes and also to promote research.

On the basis of the information presented in this section, the following recommendations are made:

1. It is essential that counselors recognize and understand their own biases, since individuals cannot work effectively with others without
first dealing with their own biases. In addition, counselors must be willing to disclose these biases to their clients if they are to establish truly effective communications.

2. Counselors must make an explicit effort to understand the background and culture of the target population of students with which they work, but they must also remain aware that each student is a unique individual within the culture that influences him.

3. Differences in language patterns, dialects, and styles should be tolerated and not construed as disrespectful or indicative of intellectual deficiency. Conflicts that may result from differences in communication patterns should be pointed up; however, such differences should be tolerated.

4. Minority group counselors, in addition to counselors from the dominant culture, should receive intensive and extensive training in working with minority students. They have gone through a system that emanates primarily from the dominant culture. In going through this system, they may have assumed white, middle-class values that may remove them from minority group clients.

5. Counselors must be willing and encouraged to effect changes in the student's out-of-school environment.
Chapter 3
SCHOOL PLACEMENT SERVICES AND THE COMMUNITY

2. PLACEMENT SERVICES OPERATED WITHIN THE SCHOOL IMPROVE SCHOOL ACCOUNTABILITY, PROMOTE AND ENHANCE THE RELATIONSHIP OF THE SCHOOL WITH BUSINESS, INDUSTRY, AND OTHER AGENCIES PROVIDING JOBS FOR STUDENTS.

The needs which noncollege-bound youths have for placement and follow-up assistance are well-documented in the literature. In this chapter, documents focusing on such services are presented under the following subtopics: (1) the concept of school-based placement services; (2) the impact of school-based placement services available to youth; (3) the availability of such services; and (4) the degree to which schools have realigned and should realign their practical career guidance services to include more and better placement and follow-up provisions. One section of this chapter is devoted to each of these four subtopics; each section displays and summarizes the literature. The final section of this chapter summarizes the findings of the preceding sections and presents recommendations on each subtopic. Literature published during and since 1968 is stressed although key sources dated earlier are included to provide a balanced summary of the development as well as the current status of conditions related to each topic.

a. The Concept of School-Based Placement Services

Every document reviewed indicated that placement services should be provided for youths in general and noncollege-bound youths in particular. As noted in Chapter 1, no one seems to doubt that such services can benefit both: (1) career planning and development needs of young people or adults and (2) societal needs, particularly employer demands for employees. However, there are varying opinions on: (1) what the concept of placement includes and (2) whether a comprehensive set of school-based practical career guidance services should include placement. These issues are considered below.

Definitions of placement vary according to the decision-making areas for which placement assistance is needed. Where "career" is defined in a narrow occupational or vocational sense, placement is usually restricted to helping individuals get jobs (part or full time, seasonal or year-round). This is the prevailing definition. However, Bottoms, Gysbers, & Pritchard (1972) and Cochran & Peters (1972) stress that placement must include not only job finding assistance but also counseling that aides students in adjusting to their jobs. Similarly, Venn (1971) stipulates that placement entails counseling and follow-up, including placing students in jobs, continuing to counsel them on the job, and following them through their careers.

Hitchcock (1968), writing for the Georgia State Board of Education, defines job placement in its narrowest sense (i.e., job finding) but adds in-school and postschool educational placement to this. For Hitchcock, placement is "the service in the organized program of guidance services which is concern-
ed with getting the student in a situation in order for him to execute the plans that were made in the counseling session." (p. 4.) In that service, he includes placement in school courses and advanced placement programs, acceleration and promotion to high grade levels, assignment to physically handicapped classes, and postschool placement (such as in further education, training, or jobs). This definition is compatible with the one provided by Pate (1971), who notes the placement definition adopted by the American School Counselors Association (ASCA): assisting students "in making appropriate choices of school subjects and courses of study and in making transition from one school level to another, one school to another, and from school to employment." (p. 288.) The ASCA approach seems to include assisting students to select and engage in work experience and cooperative (industryschool) educational programs of the type described by such persons as Davis (1972), Evans (1971), and Huffman (1971) as well as in those ventures classified as "partnership" programs (e.g., American Telephone and Telegraph Company, 1970; Economic Development Council, 1972; Institute for Educational Development, 1969; and Minelli, 1971).

As noted above in the reference to Venn (1971), there has been some attempt in the literature to include in the concept of placement follow-up of students who leave an educational program. On the other hand, authors such as Pate (1971) present placement and follow-up as coordinated, interdependent activities. Most authors conjecture that follow-up techniques can be used to provide information on young persons' postschool experiences and for evaluation of prior education, training, guidance, counseling, and placement (Eninger, 1965, 1968).

With this extension, the concept of placement can be more specifically made operational by identifying the activities of placement and follow-up personnel. For example, Eninger (1968) identifies 16 common functions of placement staff in his randomly selected, stratified sample of 100 secondary schools that offer technical and industrial vocational courses across the United States. He lists the following activities, which illustrate both the limited (but prevalent) job finding and follow-up definition of placement and the lack of emphasis on personalizing these types of assistance so that youths are helped to make decisions and take responsibility for their development:

- Advising students on how to find jobs
- Arranging employment interviews with students
- Finding jobs for students during the school year
- Contacting state employment services
- Finding summer time jobs for students
- Assisting former graduates to find jobs
- Canvassing local employers for job opportunities
- Conducting follow-up surveys of graduates
- Reviewing want ads for job opportunities
- Speaking to civic groups to promote placement
- Arranging posthigh school opportunities
- Canvassing nearby communities for job opportunities
- Canvassing labor unions for job opportunities
- Coordinating cooperative training programs
A second basic issue related to the concept of school-based placement services concerns the degree to which schools should engage in placement. This chapter's hypothesis assumes that there should be school-based placement programs. This assumption is accepted in at least 90% of the documents reviewed on the topic of placement services; however, there are dissenters. A set of guidelines published by the National Vocational Guidance Association (1965) and aimed at promoting coordination between educational institutions and public employment agencies suggests that the main responsibility for placement should be assumed by out-of-school employment services:

The Employment Service must work out arrangements to facilitate the transition from school to employment service for those students selecting to have the Employment Service help to secure their placement at work. [Students should have an] organized guidance program for identifying and counseling students who will be entering the labor force without first attempting college. [Schools should provide the Employment Service] with information helpful for the placement of students who may elect to avail themselves of that service. [Employment Service personnel should] provide employment counseling and placement, including special services for young persons newly entering the labor market. [Both the schools and the Employment Service should] provide placement services for part-time and summer employment as well as for work-study programs. (pp. 218-220)

This article provides an excellent indication that at least in 1964 a major group of guidance and counseling representatives did not perceive that placement of noncollege-bound students was a school function, or were cautious about initiating school-based placement. Statements such as this undoubtedly fostered in the minds of many persons the idea that counselors were concerned primarily with college-bound youths.

Norris, Zeran, & Hatch (1966) concisely summarize the concerns of persons opposed to school-based placement:

Advocates of this point of view argue that it is uneconomical to maintain two public agencies—the school and the state employment service—which provide similar services. Further, they claim that the state employment service, with a staff trained in placement techniques and devoting its full-time and resources in study of job openings, requirements, trends, and analysis can provide a better service than the schools. Moreover, school personnel often have many other responsibilities that placement activities are not adequately provided for. The schools, in addition, cannot hope to provide a continuous placement service to students after they leave school. As future adult workers, students become accustomed to using adult agencies as soon as they leave school. (p. 346)

The majority of the authors who address themselves to the placement topic
disagree with these "advocates" of out-of-school placement activities. Persons such as Kaufman et al. (1967), Schafer & Polk (1967), and Roche (1970) believe that schools must offer students continuous counseling, placement, and follow-up assistance once they leave school. Bottoms & Thalleen (1969) and Gysbers & Pritchard (1969) receive extensive support for their explicit claim that placement should be part of school services. For example, Kaufman & Lewis (1968) conclude that:

Any assessment of the relationship between training and occupational development must take into consideration the bridge that allows the individual to move from the training environment into the job market itself....The placement office of a high school is, or should be, in the best position to perform effectively the transition function. (pp. 90-91)

One of the most cogent supportive statements is presented by Circle (1967), who concludes that if a school has a vocational guidance program, school-based job placement has an integral function in young persons' vocational decision-making because:

... (1) the vocational choice process is developmental and (2) multi-decision-making is involved....As the individual matures both internal and external realities are changing, and changing realities can result in discontinuity. The termination of discontinuity requires a decision and quite often this decision would relate to a vocational placement....the evaluation of opportunities, the final selection of the appropriate one, and the implementation of the decision are all within the framework of a single vocational decision. To extract the final increment called vocational placement from the decision and the realm of counseling is to terminate student-counselor interaction before the solution of vocational discontinuities. (p. 10)

Circle goes even further when he postulates that most employment service staff are not trained to facilitate this type of developmental decision-making. Also, they must stress the demands employers make for qualified employees, rather than individualized needs and characteristics of youths. Circle represents the majority opinion of educators in the realm of career guidance, counseling, and placement. However, Roche (1970), who has had intimate experience with state employment services, feels that these agencies are much more successful than schools in helping students get jobs. He recommends greater school-employment service cooperation and concludes that:

Whatever the shortcomings of the employment service in various states, the fact remains that their local offices have become the focal point for job placement and for recruiting the disadvantaged and others for the vast array of federal manpower training programs....What is needed is closer cooperation between employment service specialists and high school counselors in working out career programs for each youngster. This could best be done by having the employment service station at least one professional,
on a full- or substantial part-time basis, in each high school.
(p. 24)

Not everyone agrees with Roche that state employment agencies are more successful in job placement than are schools. However, he does receive much support for his recommendation of greater cooperation between such agencies and schools.

b. The Impact of School-Based Placement Services

The major issue on which this chapter's hypothesis is founded requires an assessment of the quality of school-based placement and follow-up services. The criterion for this assessment is the degree to which such services help schools improve their:

1. Accountability.
2. Relationships with communities (especially with business, industries, and other agencies that provide jobs for youths) in which they are situated.

Accountability, the key factor in this criterion, is defined here as the extent to which school-based placement services meet the needs of:

1. Noncollege-bound youths.
2. School systems (e.g., budgetary needs, staffing concerns, program priorities issues).
3. Society (e.g., employer needs for new personnel).

Objective, well-structured data are not available with which to evaluate the impact of placement services. In fact, the existing evidence is primarily subjective, usually depending heavily on the attitudes and opinions of placement personnel and their community contacts. In a few cases, the reactions of placement service clients have been formally elicited and reported. Most documents addressed to the question of placement impact are based on expert opinion, which is founded on little if any empirical data. Statements indicating that placement and follow-up services have a positive impact or that there is no evidence of either positive or negative impact are summarized below.

1. The Positive Impact of Placement and Follow-up

Since there have been no comprehensive studies of the process, products, and cost-benefits of different types or instances of placement and follow-up services, descriptions of individual programs were consulted. A few such reports exist which invariably provide limited details on the nature of the programs and the evaluation data collected.

Buckingham (1972) presents more details on the placement approach with which she is concerned than is provided by most program directors. She describes the Placement Service of the Baltimore Public Schools and perceives it
as working effectively. In fact, Buckingham is so enthusiastic that she believes this type of placement should be an integral part of career education. She concludes that over the last 40 years Baltimore's service has placed 70,000 students in full-time jobs, 60,000 in part-time positions, and 40,000 in temporary or summer jobs. Although Buckingham's criterion of the "number of students placed" might not be the most desirable yardstick for assessing the impact of placement activities and although she does not describe how she arrived at her tallies, she has the distinction of being able to report quantified evidence related to placement effectiveness and efficacy. Although she does not summarize data that apparently must be available, she reports that at three-month and twelve-month intervals the Baltimore Schools follow up all students placed in full-time positions immediately following their exiting from school programs, as well as work study students who remain at their work stations as full-time employees. The purpose of this activity is to gather employers' impressions of each employee's efficiency and attitudes and each school's programs and the student's reactions and suggestions for the placement service.

Georgia's statewide job placement program for area vocational-technical schools is reported as beneficial by Bottoms & Thalleen (1969). Bottoms (1966) describes some of the planning efforts and elements that evolved into this type of program, which is a desirable part of the total student personnel services for students in such schools. Undefined instruments were employed for collecting information on student and employer reactions to the process, rather than on outcomes of the program. As a result, the authors list elements that representatives of these two groups liked about the program and conclude that Georgia's approach was "enthusiastically received by students, instructors, student personnel specialists, school directors, and companies seeking employees." (p. 12.) However, they cannot state what influence it had on the career planning and development of youth. Although Bottoms and Thalleen believe that all aspects of education must be measured by the career planning assistance and preparation they provide students (as stated in their quotation earlier in this chapter), they did not use this standard to evaluate their own program.

The role of a full-time "Job Placement Coordinator" in the career guidance portion of Delaware's "Occupational-Vocational Education Model" is detailed by English (1972). A prototype of this model, which attempts to be compatible with the USOE-fostered career education thrust, currently is undergoing field tests in Milford, Delaware. Job descriptions for the Job Placement Coordinator in the prototype indicate that he is, or should be, performing many of the tasks reported in the Eninger (1968) list displayed earlier in this chapter. English's progress reports support this placement aspect of the model and suggest some scheduled improvements in it, but these claims are substantiated with little more than highly subjective reactions and figures summarizing the number of students placed.

Rosenfeld, Schubert, and Collins (1971) report supportive data on the placement component of a vocational education counseling system in the Pittsburgh Public Schools. These investigators conclude that "a substantial proportion (76%) of those who desired a certain course of study in high school were so enrolled and that most of those placed after graduation were in
positions for which they had been trained and with which they were satisfied." (p. 98). However, it seems that the graduates did not agree that the school-based placement assistance they received was that helpful. A 1968 follow-up study indicated that only 25% of the former students felt school placement helped them get their first jobs. Unfortunately, the evidence presented by this study cannot be construed as clear-cut support for school-based placement since the effects of placement activities were mixed with those of other variables influencing youths' decision-making.

Similar problems are found in other reports on placement. The Houston (Texas) Vocational Guidance Service (1970) believes that the placement aspects of its "group guidance program" are successful. However, no evidence other than expert opinion is documented in the interim report, since the attempted follow-up of students was unsuccessful. In addition, from the brief outline available, it appears that the project's placement provisions are based more on employment services than on school. Therefore, the Houston project is of only questionable relevance to this review.

A district-wide placement approach employed by the Kansas City Schools is reported by Herdler (1968). Although he does not provide details on the program's evaluation design, procedures, or results, Herdler claims that during the 1965-66 school year the Central Placement Service was especially satisfactory in that it received 1,406 student referrals, placed 431 students, made about 3,500 employer contacts, referred 197 students for vocational rehabilitation, and generated considerable goodwill between the Kansas City School District and the business community. This report is one of the few that considers the community image aspect of the placement assessment criterion specified at the beginning of this section.

Similar subjective data (primarily positive reactions from students and staff) are reported by Circle et al. (1968) when they detail a "how-to-do-it" outline for school- or district-based placement. Their report, which is primarily descriptive with little information of a rigorous evaluative nature, provides the most detailed illustration of a placement service available for this literature review.

Finally, two studies dating back to the 1950s provide empirical support for the efficacy of placement services. Cuony & Hoppock (1957) conducted a class by administering counseling and placement assistance on job finding and job orientation using an experimental group of 12th graders. On follow-up studies of one and five years, these investigators compared the experimental with a comparable group of control seniors. On both follow-ups, the experimental group reported significantly higher earnings and greater job satisfaction. Odell (1953) surveyed the placement of high school graduates in 11 states by comparing students who had complete testing, counseling, and placement services with ones who had incomplete or no services. He found that 24% more of the graduates in the first category found suitable jobs than did youths in the second group and that nine of ten of them reported satisfaction in their jobs compared with seven of ten of the graduates in the second category. Neither of these studies displays stringent evaluation design and controls but both of them provide data on which could be based statements about the accountability of placement services.
2. Opinions on Placement and Follow-up

No studies were found indicating that placement and follow-up activities have had a detrimental effect on youths. However, many references postulate that schools have done a poor job of placement. For the most part, these references are based on highly subjective reactions of their authors as well as of current and former clients and staff of placement programs. Objective data are not available.

Authors such as Schafer & Polk (1967), Roche (1970), and Venn (1971) are convinced that schools have not been effective in providing placement assistance for youths. Roche believes that on the basis of his experience with the Illinois State Employment Service, public employment agencies have responded more successfully to the placement needs of youths than have schools. Venn concludes that students graduate without negotiable skills, without access tools for the world of work, and with little school-based placement assistance.

The strongest criticism of school placement and follow-up is voiced by Schafer and Polk. In their literature survey for the President's Commission on Law Enforcement and Administration of Justice, they list "a number of defects in the way noncollege preparatory programs in the secondary school link the school career to the later occupational career." (p. 246.) Two of their seven "defects" relate to student placement. For the first of these, they conclude that:

...occupational guidance and placement services are usually non-existent or are grossly inadequate...entry into the labor market is frequently random and nonplanned, and when a student is taking courses he has little knowledge of later occupational requirements and little assurance of later rewards. (p. 247)

For the second placement-related defect, Schafer and Polk complain that:

...the responsibility of the educational system terminates immediately after the student has either graduated or dropped out, rather than when he enters productive and stable adulthood. For students who go on to college, the educational system's responsibility for guiding and directing the work-bound youth into full adult status continues. (p. 247)

They recommend that schools provide guidance services for all youths (employed or unemployed) until they are 21 years old.

What may be the most serious indictment of school-based placement and follow-up results from asking noncollege-bound respondents how they obtained their first jobs. Consistently, such responses place school services and personnel (e.g., teachers, counselors, and placement coordinators) low in the hierarchy of sources of assistance. For example, Little (1970) reviews the results of nine studies on the placement and follow-up of vocational education students. He includes in his survey studies conducted since 1965 on the secondary, postsecondary, and adult levels. Of the nine, one investigation reported a lack of national data on placement and follow-up as well as the
absence of any system for reporting these data in detail. Six of the remaining eight studies indicated that fewer than one-third of the youth respondents acknowledged that their schools were helpful in their job placement. Relatives and friends typically were the most effective sources of help. Self-initiated means (e.g., direct applications and contacts with employment agencies) were also employed frequently. The remaining two studies did not collect data relevant to this issue; however, graduates and dropouts contacted in these projects indicated that they were deprived of occupational counseling, occupational information, and placement services. Little concluded from his analysis of the nine studies that "the lack of well-developed placement programs may be a crucial weakness of many current programs of vocational-technical education." (p. 336.)

Kaufman et al. (1967) used questionnaires and interviews with 8,400 high school graduates. Of three major weaknesses respondents identified in secondary schools, one was poor guidance, placement, and follow-up activities. As in the studies summarized by Little, Kaufman and his associates found that the primary method of actual job finding used by graduates was direct application and other self-initiated methods. Vocational education graduates of both sexes were more likely than others youths to be placed by schools. Kaufman & Lewis (1968) found similar results in follow-up studies of high school graduates from four different years in three Pennsylvania cities. The investigators conclude the 1967 study with a note similar to that sounded by many other workers in this field. They recommend that high schools assume responsibility for establishing a posthigh school plan for each graduate. Those students who choose to work should receive school assistance until they are placed in jobs. In the 1968 investigation, they lament the finding that youths depend primarily on themselves and personal contacts when they have placement needs. The desirability of improved school-based placement services is obvious in their conclusion:

A potential job market whose boundaries are determined by one's own knowledge of opportunities, plus the awareness of family and friends, is far from being optimally efficient in the sense of matching abilities and interests with available jobs. In the case of the non-vocational graduate, no marketable skill has been provided in many cases so that an efficient pipeline between school and job may be even more critical in terms of the best use of human resources. (p. 92)

An article published by the U.S. Department of Labor (1968) uses expert opinion supported by research findings as well as educational and employment statistics to discuss the employability problems of youth. It reiterates the results of studies reviewed above when it reveals that the preponderance of jobs for youth are found by personal contacts by young people themselves. The way in which schools handle placement is identified as a potentially serious problem. However, the Department of Labor's solution--providing youths with job information from a network available to an employment service--is questionable since it ignores other types of career planning and development assistance youths need.

Stevenson & Sandlin (1970) report that up to the time they terminated their search in 1970, little was being done by high school guidance people to in-
fluence the job placement of Oklahoma students. On the basis of their state-
wide examination of existing guidance, counseling, and placement practices,
they believe that counselors identify themselves as therapists rather than
career specialists and have little interest in working with job placement and
follow-up activities for youths. Stevenson and Sandlin summarize the findings
of selected surveys conducted by the Oklahoma State Department of Education.
One study indicates that no schools provided job placement services to any
degree. A 1967 survey of 30,000 high school seniors in Oklahoma determined
that 34% of them believed that counselors and teachers had "no effect" on
their career decisions, 54% agreed that they had "some effect," and only 12%
signified that they had "quite a bit" of influence. These findings are con-
sistent with ones reported by Eninger (1965) following a well-organized compre-
hensive survey of 4,368 high school graduates from the years 1953, 1958, and
1962. In one part of the Eninger questionnaire, graduates were asked how they
perceived their schools' vocational counseling and placement services as well
as eight other services. These two services tied in receiving the least favor-
able rating of the ten services. Eninger concludes that "the relatively low
ratings given to vocational counseling, placement services...do reflect a
greater degree of dissatisfaction with these factors, and a greater need for
improvement." (p. 8-4.)

Two concerns are paramount as a result of the literature reviewed in this
section. First, it is impossible to derive cause-effect implications from the
available subjective data on placement and follow-up services. The negative or
nonsupportive findings reported by the comprehensive survey and follow-up
studies do not indicate whether available services are simply ineffective and
inefficient or whether insufficient services were available to meet the needs
of youths. The authors of most reports imply that the former point is approp-
priate, but a few studies have been directed toward the latter point. These
will be reviewed briefly later in this chapter. Both points probably are
applicable: available services are inadequate and do not effectively and
efficiently meet the needs of all youths they serve.

Second, reliable empirical data related to the placement hypothesis are
not available as already mentioned. The hypothesis needs information related
to: (1) improved school accountability because of placement and follow-up
services in all career areas and (2) improved school-community relationships as
a result of such services. No studies provided detailed evidence of the second
type. In addition, reports such as the Willis Committee Report (U.S. Department
of Health, Education, and Welfare, 1963), the Essex Committee Report (Sub-
committee on Education, United States Senate, 1968), Social and Educational
Research and Development, Inc. (1968), and Hawkridge et al. (1970) criticize
the lack of objective evidence collected through placement and follow-up
services in vocational education. More concerted attempts to collect such data
are now being made. Most of the available evidence relates primarily to the
degree to which the needs of youths have been met by placement and follow-up
activities. The degree to which school system and societal needs have been
resolved was not covered.

Venn (1971) directs his attention to the type of accountability highlighted
in the placement hypothesis. He believes that all vocational educators should
collect accountability data and that schools should be subject to outside
evaluators and be required to publicize results of these findings so that all citizens can help determine ways to modify programs to obtain better outcomes. Demanding that educators do these things, however, is much simpler than demonstrating how to collect accountability information and assisting them to acquire and practice the requisite skills so they can do it themselves.

c. Availability of School-based Placement Services

One part of the accountability criterion emphasized in the placement hypothesis relates to the quantity rather than the quality (i.e., effectiveness and efficiency) of placement and follow-up services. The appropriate issue is whether there are sufficient services to meet the needs of youths (especially those of the subgroups noted previously) and society. Although this issue actually is part of the impact issue discussed in the preceding section of this review, it is emphasized here to ensure that all aspects of a rather limited body of research are given specific attention. However, it is recognized that the key issue is not the number of services available, but the effects that those services have on the youth, school, and society they serve.

No document reviewed states that there are sufficient placement and follow-up programs in any school districts, states, or regions. The few references that report opinions or empirical evidence on the number of programs conclude that too few services are available. Campbell (1966) surveyed 108 high schools in Texas and found that 68% of them could report that they had only incidental services, while a scant 9% believed they had organized placement provisions. The remainder fell between these two extremes.

Education U.S.A. (1971) suggests that more schools are beginning to implement placement and follow-up services. Some programs are described, but the implication is that there are few such programs. Probably because of this fact, the article ends with a strong recommendation that each secondary school should be an employment agency, should establish a placement office to help its graduates find jobs, and should make part-time employment part of the curriculum. It is also recommended that as many resources as are expended in counseling and following up students who continue formal education should be devoted to following up dropouts.

A few other references allude to the limited number of both placement and follow-up services in secondary schools. The previously noted study by Stevenson & Sandlin (1970) points out that a survey by Oklahoma's Superintendent of Public Instruction revealed that almost no schools in that state provide placement activities to a significant degree. A 1968 report by the U.S. Department of Health, Education, and Welfare indicates that few follow-up activities are conducted by secondary schools; therefore, only limited useful data are available on the placement of their graduates. Because the scattered follow-up surveys are conducted on different bases, the resulting data lack comparability. Similarly, on the basis of personal experience and a review of literature between 1968 and 1970, Cochran & Peters (1972) conclude that placement activities do not seem to be part of the majority of secondary school programs, including vocational education programs. They report that few
schools seem to conceive of placement as an integral part of education. In this same vein, Little (1970) provides a concise summary of this area of the literature review. He concludes that:

The search for studies dealing specifically with placement activities was practically fruitless. Placement is typically viewed as a separate activity from the educational program. Few secondary schools conceive job placement as a built-in function. Proprietary vocational-technical schools strongly emphasize the placement function and thrive upon excellent placement and other working relationships with business and industry. (p. 36)

d. School Realignment for Placement and Follow-up Services

The bulk of the literature on placement and follow-up services claims that schools should realign their programs to include these services as integral parts of a comprehensive set of practical career guidance offerings. These documents usually make no attempt to review the literature or summarize available data to support the recommended realignment. They typically make recommendations, perhaps providing either some suggestion about how the realignment should occur or some illustrations of schools that have undertaken such realignment.

Perhaps because the discussions of realignment possibilities seem to be based so heavily on expert opinion, no references state that there is insufficient evidence on which to base a determination on whether realignment should occur. Also, the only documents that recommend that school realignment should not take place are those that question schools' involvement in student placement. Pate (1971) points out that there is disagreement in the literature on the legitimate role of high schools in vocational placement. He also comments that the counselor's responsibility for in-school placement is not well-established in the areas of special classes and work experience. In the first section of this literature review on the placement hypothesis, school involvement in placement was discussed and references were made to discussions by the National Vocational Guidance Association (1965) and Norris, Zeran, & Hatch (1966). These statements tend to be outweighed by the seeming conviction that schools should be involved in all aspects of vocational placement. This conviction does not hold for all areas of career placement, because other areas of career placement and follow-up activities have received little attention in the literature. The discussion on the following pages reviews documents that state that school realignment is occurring and should continue to occur.

In the 1972 Manpower Report of the President, the U.S. Department of Labor outlines recent youth unemployment conditions and evolving trends. The serious unemployment problems of black and white youths are graphically displayed in the tabulation on page 3-13. As indicated black teenagers have a rate of unemployment more than double that for white young people. These data are consistent with those presented in the U.S. Department of Labor's Handbook of Labor Statistics (1971). For example, the latter volume shows that the unemployment rate of white youths (16 to 19 years) increased 11.0% between 1965 and 1968, while that of black (and other minority ethnic group) youths jumped between 24.0 and 26.2% during that same period and climbed to 29.1% in 1970.
## UNEMPLOYMENT OF TEENAGERS 16 TO 19 YEARS OLD, OCTOBER 1971

<table>
<thead>
<tr>
<th>School attendance and color</th>
<th>Number unemployed (thousands)</th>
<th>Unemployment rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Boys</td>
</tr>
<tr>
<td>Total</td>
<td>1,161</td>
<td>635</td>
</tr>
<tr>
<td>White</td>
<td>932</td>
<td>512</td>
</tr>
<tr>
<td>Negro and other races</td>
<td>229</td>
<td>123</td>
</tr>
<tr>
<td>In school</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>624</td>
<td>373</td>
</tr>
<tr>
<td>Negro and other races</td>
<td>121</td>
<td>67</td>
</tr>
<tr>
<td>Out of school</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>537</td>
<td>262</td>
</tr>
<tr>
<td>Negro and other races</td>
<td>108</td>
<td>56</td>
</tr>
<tr>
<td>High school graduates</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>303</td>
<td>121</td>
</tr>
<tr>
<td>Negro and other races</td>
<td>52</td>
<td>25</td>
</tr>
<tr>
<td>Dropouts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>234</td>
<td>141</td>
</tr>
<tr>
<td>Negro and other races</td>
<td>56</td>
<td>31</td>
</tr>
</tbody>
</table>

1Percent not shown where base is less than 75,000 (p. 82)

One of the results of data presentations such as those in the President's Report is a series of strong recommendations on how young people's preparation for work and transition from school to work can be improved. The recommendations are best summarized in statements such as the following:

In the long run, effecting a smooth transition from school to work for the Nation's youth calls for restructuring this process and the institutions involved in it. This will require radical changes in thinking about the role the schools should play in preparing youngsters for the world of work and help young people have a right to expect assistance in facing the many complex decisions required of them in selecting and preparing for a lifetime career....The present emphasis on the completion of a high school education and, if possible, going on to college frequently overlooks the need for the kind of education which will give the noncollege-bound youth career preparation suited to their individual needs (p. 99)....the already critical job-finding problem of black youth will not show improvement unless rapid progress is made in upgrading their education and job preparation, widening their employment opportunities--both occupationally and geographically--and giving them greater job placement assistance. (p. 80)
This general recommendation is translated into semispecific ones. The Department of Labor addresses its suggestions to both school-based and employment service-based placement. One of the recommendations is for more "career-oriented education so that young people not bound for college will be prepared for an occupation upon leaving high school." (p. 78.) Another one emphasizes the need for "more adequate guidance and job placement services." These changes will require "policies specifically designed to reduce the structural barriers which impede young workers in locating jobs." (p. 78.) The nature of realignment plans to be contained in such "policies" is not considered in the President's report and apparently still must be determined.

Similar general statements supporting school realignments to improve student placement are presented in other major federal government documents. They are exceptions; in the President's 1967 Commission on Law Enforcement report, Schafer and Polk discuss some specific improvements. As noted previously, they believe that schools should have responsibility for youths until they become productive and stable adults. In addition, they believe that each school should have an occupational placement and follow-up office:

In the past the schools have not seen it as part of their mission to take a serious and active role in guiding youth into the world of work, in providing continuing counseling and guidance services in connection with work-related problems, or in aiding unemployed youth in developing new skills and finding work....the general mandate of the schools should be broadened to include responsibility not only for preparing youth for productive, responsible, and satisfying adulthood--but for guiding them into adult positions. ...Moreover, part of the school's accountability should be its record in sending noncollege-bound youth into labor markets. (p. 270)

No further details are provided on the nature and role of Schafer and Polk's proposed "office" in every school.

Outweighing the number of government manuscripts that reinforce the need for realigned school programs to promote improved placement and follow-up services are the many articles and reports available through the professional literature. Many of these tend to focus on general recommendations for school changes, omitting specific suggestions and guidelines that seem to be needed by practical program personnel. For example, Parsons (1971) states that it is "past time to offer lifetime placement counseling to high school dropouts and college graduates" (p. 300), but she does not mention practical strategies by which this should be accomplished. Similarly, Gysbers & Pritchard (1969) strongly support the premise that placement should be school-based. They discuss a number of exemplary counseling and guidance projects, but none of them has a solid placement component.

In summary, a fairly large body of literature provides fairly specific suggestions for desirable placement and follow-up improvements. Pate (1971) expresses satisfaction that what he perceives as the current trend in behavioral counseling will lead to renewed emphasis on placement and follow-up services in secondary schools. Using his comprehensive definition of placement, he discusses some issues and possible procedures related to three types of improved
placement activities: (1) activities in students' current schools, (2) activities for students' next educational situations, and (3) activities concerned with vocational placement. Pate gives follow-up services a similar treatment. Buckingham (1972) provides more assistance because she outlines some of the details of Baltimore's school-based placement services. Such a program can be used as a model for schools that seek to use it or adapt it in their settings. Buckingham seeks to stimulate other school personnel to restructure their school programs to give youths more placement and follow-up assistance.

As one of five options available to assist students in Los Angeles City Schools to make a smooth transition to the world of work, a career education support team is described by Winder (1972). The team includes: "career advisors," "occupational placement technicians," and a "career analyst." The placement staff:

...provide information and statistical data concerning career training programs, employment opportunities, and requirements.
...conduct follow-up studies regarding training and subsequent placement of pupils for the occupationally oriented programs. Additionally, this follow-up should help ascertain if the needs of business and industry are being met by the kind and quality of the occupational training programs. (p. 47)

At the request of the Assembly and Senate of California, the California Advisory Council on Vocational Education and Technical Training (1971) presents a model for a "career ladder curriculum" integrated with guidance and counseling. This model includes a solid component of "career counseling-placement-follow-up" grounded in a cooperative school-employer, two-way communication system. The placement portion of this component would ensure that well before graduation, each vocational student would have specific preparation "so that upon being graduated the student would have a high probability of being placed in a selected job of his choice." (p. 14.) Further details on the proposed placement approach are outlined by the Advisory Council as are some of the requirements for staff training to implement the model. To participate in placement, counselors will have to be trained or retrained in the following areas:

...developing [communication] channels, gathering job information, securing personal work experience, keeping job information current, keeping personnel offices apprised of the availability of job seekers, traveling, and maintaining frequent contacts with their students. (p. 15)

This model and the description of its placement component can be used in other settings by educators as guidelines or as bases for tailoring activities relevant to local needs and constraints.

The most detailed information on the nature of possible in-school reorganization to improve student placement and follow-up services are provided by Circle et al. (1968) and Rosenfeld & Schubert (1971). In a comprehensive presentation, Circle et al. outline a placement service and a follow-up service
coordinated with a comprehensive career information service. The authors outline techniques and instruments for initiating a placement service including reviewing existing state and local placement activities, enlisting the support of the district and school administration, establishing a steering committee comprising school groups interested in the service, enlisting the advice and support of a community advisory committee, contacting local employers to solicit jobs, and disseminating information on jobs through bulletins posted in schools. As a result, Circle and his fellow authors have developed a useful "how-to-do-it" manual for placement and follow-up programs.

Rosenfeld & Schubert (1971) take an entirely different approach since they concentrate on the process of placement counseling. The primary contribution they make is their emphasis on the fact that the placement process should be used to help youths gain insight into appropriate on-the-job behavior and attitudes. For example, students should be assisted in developing and practicing: (1) punctuality, (2) acceptable dress styles, (3) efficiency, (4) obtaining and acting on assessments of their performance, (5) getting along with fellow employees, and (6) getting along with supervisors. Rosenfeld & Schubert also recommend that students and potential employers be encouraged to interact with each other much earlier than actual placement, which would allow students the opportunity to learn the reality of employment.

The topic that receives the most attention in the entire area of realignment alternatives is not in-school reorganizations (that is, how schools can change themselves to meet fully the placement and follow-up needs of youths), but the cooperative realignment of school and community resources. School-community relationships constitute the second part of the criterion specified in the placement hypothesis. If a judgment is made simply on the basis of the number of printed pages devoted to each aspect of the placement criterion, school-community relationships would easily outrank school accountability. More constructive and operational suggestions have been made for this aspect of realignment for improved placement and follow-up services than for any other aspect.

Educators (Eninger, 1968; Roche, 1970; Rhodes, 1970; Burt, 1971a; Parsons, 1971; Tyler, 1971; Colloquium on Occupational Counseling and Guidance, 1972; and Herr & Cramer, 1972) are increasingly speaking out about the needs for better school-community relationships. Eninger (1968) provides a good example. One of his key recommendations following his massive survey is for:

...better school-employer contacts....Most public vocational schools do not do an adequate job of maintaining close contacts with community employers. Interaction is sporadic; unorganized and unplanned from a school-wide approach....Very clearly something more is required than the kind of social visits which presently constitute employer contacts in many schools. (pp. 10-38)

The details that Eninger omits about the methods by which school-employer contacts can be improved are provided in other references. As a second example, Tyler (1971) is more specific when he stresses the need for a close school-community relationship to implement his concept of "functional education." This concept, he believes, requires:
...the development of a close, active relation (not simply a formal one) between the school and the responsible adult community so that the student can apply what he learns in the school to the questions and problems outside the school....To make school education functional, we must furnish high school students with opportunities to carry on significant adult activities--job programs, community service corps experience, work in health centers, apprentice experiences in public agencies, research and development agencies, and in other situations where significant problems are being faced and important work is being done, and where learning is an asset. (pp. 14-15)

The 1972 Colloquium on Occupational Counseling and Guidance in New York listed nine concerns and made nine related recommendations. One concern was that schools and colleges cannot provide youths with career education unless schools attain more involvement from the business community. The Colloquium's recommendations on this topic should be useful to program staff who are attempting to improve student placement by developing closer ties with community resources. The Colloquium recommends that noncredentialed representatives from the community should be employed on a short term basis by school districts to perform selected career education functions that school staff are not trained to provide. Another recommendation is that "community resources be employed by the school district to the fullest in career education and be retooled as necessary in broadening opportunities for students to have work experience, guidance, job placement, and the like." (p. 10.) A third recommendation for improving the school-community relationship is that administrators from government, industries, business, and schools should encourage counselors (and other community agency and school personnel) to work cooperatively with community representatives to solve transition problems for students as smoothly as possible and in the best interests of students. These recommendations assume that the community not only has something to offer to the career education, planning, and development of youths but also is willing to provide its services if educators will use them. These assumptions are validated by the Woodruff (1972) article. On the other hand, many educators have apparently either not accepted these assumptions or are reluctant to act on them.

It is certainly encouraging to learn of the cooperation of community representatives. Woodruff (1972), responding as a member of industry (Pacific Telephone Company in California), believes that schools do not bear the sole responsibility for education; cooperative involvement of school and community is a necessity. Woodruff describes Project '71 in which he is participating; it is to provide: (1) youths with three types of work experience programs combined with broad career information service and tutoring service, (2) teachers and counselors with summer workshops and summer employment, and (3) administrators with management internships in business and government. Woodruff and Project '71 illustrate what can result from an effective coalition of educators, businessmen, and industrial representatives.

Burt (1971a and 1971b) evolves a cogent rationale for involving industry and business in education, provides an exhaustive review of case studies illustrating such involvement, and outlines options for attaining this involve-
ment from the vocational educator's viewpoint. Burt (1971a) notes that federal vocational education laws encouraged cooperation between schools and industry (i.e., business, labor, agriculture, manufacturing, and private professions). This encouragement is reinforced by industry's willingness to initiate industry-education relationships and to improve career and work opportunities for minority groups. Burt reviews instances of industry adopting schools; this topic, "partnership schools," is discussed briefly later in this section. He illustrates industry's willingness to cooperate in various ways with the following tabulation.

### COMPANY WILLINGNESS TO INITIATE ACTION ON EDUCATION AND TRAINING PROBLEMS

<table>
<thead>
<tr>
<th>Problem</th>
<th>Total Respondents</th>
<th>By Size</th>
<th>By Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1,033)</td>
<td>Small</td>
<td>Medium</td>
</tr>
<tr>
<td>Improvement and expansion of local school facilities</td>
<td>55.6%</td>
<td>59.6%</td>
<td>54.9%</td>
</tr>
<tr>
<td>Improvement of local school curriculum</td>
<td>48.5%</td>
<td>50.7%</td>
<td>49.4%</td>
</tr>
<tr>
<td>Problems associated with school dropouts</td>
<td>53.9%</td>
<td>58.9%</td>
<td>52.2%</td>
</tr>
<tr>
<td>Improvement of work/career opportunities for minority groups</td>
<td>69.2%</td>
<td>69.2%</td>
<td>65.2%</td>
</tr>
<tr>
<td>Retraining of workers rendered unemployed by automation</td>
<td>72.6%</td>
<td>73.2%</td>
<td>70.6%</td>
</tr>
</tbody>
</table>


Burt (1971b) illustrates five categories of services that industry can offer to education: (1) helping improve school management and administration; (2) helping upgrade professional staff primarily through teacher assistance; (3) helping improve instructional programs; (4) helping improve public relations; and (5) helping student recognition, recruitment, selection, and placement. A more detailed listing of 32 services that can result from industry-education relationships is given in Burt (1971a, pp. 185 and 186).
Partnership high schools are among the most significant instances of school-industry cooperation. Such programs are well-documented in the literature by the Institute for Educational Development (1969), the American Telephone and Telegraph Company (1970), and Minelli (1971). As described in the Institute for Educational Development document, the focus of these partnership efforts is not on placement but on improving school environments and the educational process. If placement services are part of the relationship, students receive assistance in obtaining part-time, summer, and full-time work, usually with the assistance of the business or industrial concern that "adopted" their school. In addition, employment readiness courses frequently are taught at school by company personnel and counseling and follow-up programs often are implemented in conjunction with the job placement service.

The American Telephone and Telegraph Company (1970) lists four objectives for a partnership in which it participates:

1. To help students who are underachievers.
2. To break down barriers and bridge the communication gap among students, counselors, teachers, businessmen, and public officials.
3. To improve the educational process.
4. To arrange for the cooperation of many businesses and public organizations.

Similar ventures have been undertaken by groups such as General Mills Inc. (with the Lincoln Learning Center in Minneapolis, Minnesota), Bell of Pennsylvania (with Fifth Avenue High School in Pittsburgh, Pennsylvania), Southwestern Bell Telephone (with McKinley High School in St. Louis, Missouri), Michigan Bell (with Northern High School in Detroit, Michigan), and McCormick Company (with Henry Lee High School in Baltimore, Maryland). The types of services that industry typically provides in collaborative efforts such as these include work study, job placement and career guidance, basic skills training and remedial education, curriculum development and evaluation, administrative services, community relations, health services, and materials and financial resources.

Not all of the partnership school relationships have been effective according to Carlson (1970). He claims that:

...there were blissful expectations of immediate results... corporate hopes frequently were shattered when the complexities of the educational world proved more baffling than foreseen....Whatever the outcome of these and other ventures, it is clear that the traditional relationship between businessmen and the schools is changing. No longer do executives think it is sufficient merely to provide jobs for students; they're beginning to realize they must take an active role in working with schools to develop these manpower resources. Yet, it is also clear this is turning out to be a much tougher task than expected. (p. 60)

Although he identifies a number of problems, Carlson obviously believes that
realignment of school-community relationships will continue.

Other illustrations of school-industry relationships that include placement provisions are cooperative education programs and the less formal and less comprehensive work experience programs in many secondary schools across the United States (Evans, 1971; Huffman, 1971; Parsons, 1971; Rosow, 1971; and Davis, 1972). Rosow (1971) believes that cooperative education programs through which youths can alternate school and work have special relevance for noncollege-bound youths. The benefit for a young person is that he can gain the work experience he needs to counter youth unemployment problems. Also, his employer and his school can exchange information on his development and can provide placement assistance for part-time and full-time jobs after he graduates. Davis (1972) believes that work experience activities are an ideal strategy for combating the school dropout problem. Through the Florida program he describes, youths "become employable" and "are ready to continue with specific job training or other educational pursuits" (p. 29), absences decline, and community agencies applaud.

It is apparent that there is considerable support for reorganization of school-community relations. Numerous references can be found that are similar to the following statement from a document published recently by the Institute for Development of Educational Activities, Inc. (1972):

"The schools are going to have to start moving into and using the entire community as the basis for their educational programs. Too many young people are coming out of our high schools today never having put in an honest full day's labor. They have missed this maturing and self-disciplining process that comes with the responsibility of a job. Educators cannot duplicate the job situation on the school premises. It must be provided in the community. This is why each student should be required to take a term of work experience. Any administrator or teacher who cannot see the learning value in such an experience is kidding himself!" (p. 10)

As noted by Hodges (1972):

"Any company can loan its employment manager to teach an employment readiness course. Any company with a computer can give help to a data processing class. Any company with a management development program can lend its aid to a group of school administrators. Any company can make tutors available. In other words a wealth of expertise is available in large and small companies. Only two steps are needed. One, business needs to offer its help to educators. Now, educators need to go to business and ask for help. It is really very simple." (p. 13)

There are obstacles impeding the development of such cooperative ventures and the identification and removal of such obstacles must receive attention. Educators frequently are criticized as being poorly motivated for pursuing cooperation with community organizations. Other critics claim that educators do not know how to integrate successfully the available community resources, initiate the use of resources to implement them effectively, and evaluate
their impact. However, the obstacles can occur on both sides of the relationships. Some educators in small communities believe that the farther away companies are from their home offices, the more they are production-oriented and reluctant to take time away from their jobs to assist schools. Other educators hesitate because they sense the frustration often experienced by community members who cooperate to work with unmotivated students. Also, there are recalcitrant educators who assert that many industries and businesses wish to cooperate only because they seek to transfer the financial burdens of training to the schools. It is obvious that constructive problem solving is required on the part of educators and community members.

e. Summary

Although some attempts have been made in the literature to define placement as more than a job-finding service, the types of human decision-making on which it has focused have been confined to vocational and educational choices. For example, Bottoms & Thalleen (1969) proclaim that their placement approach is:

...based on the belief that education at all levels should be evaluated in terms of the extent to which students are prepared for their next step and assisted in planning and implementing that step. Thus, if work is the next step for individuals, regardless of the point of departure from school, their movement is too important to be left to "chance." Assisting each individual in making the best possible transition requires a total school effort on a fully organized basis. ...Job placement should not begin at the point in time when the student initiates the separation from school, but should be a continuous process that begins upon the student's entrance into the school. (p. 14)

Their statement agrees with a definition of placement as a continuously developing process; however, Bottoms & Thalleen's article limits its application to the vocational area. The literature makes some attempt to include within the concept of placement the follow-up of students who leave educational programs. Whether placement and follow-up are synonymous or are separate elements does not seem to be crucial; both types of activities must be implemented and must be coordinated. Eninger (1968) lists 16 activities that make up the narrow but commonly used job-finding and follow-up definition of placement.

Concerning the degree to which schools should be involved in placement, at least 90% of the documents reviewed supported the assumption that there should be school-based placement and follow-up services. Dissenters believe that it is uneconomical to maintain school and state employment agency placement programs; therefore, schools should turn such services over to state offices.

Regarding the impact of school-based placement and follow-up services, the evidence suggests that such services generally have not been successful. Because of the lack of comprehensive studies of the process, products, and cost-benefits of such services, the literature review used reports of specific projects to identify placement approaches that seemed to have a positive
impact. Even in those cases, the data collected on placement and follow-up usually were primarily based on attitudes and opinions and were gathered in an unstructured manner.

Frequently, the research reviewed in the section on Opinions on Placement and Follow-up (Section b2) used more systematic, comprehensive assessment designs, procedures, and instruments, including surveys of randomly selected current clients and staff members of placement services and follow-up studies of randomly selected graduates who supposedly had access to such services. Although the methodology of these attempts was more sophisticated, the data that they produced were just as subjective as the results of the individual programs summarized earlier.

On the basis of the literature review in this chapter, the reader might decide that the chapter's hypothesis was not supported. However, the appropriate conclusion seems to be that because of the lack of objective, reputable empirical evidence, no decision can be made as to the acceptance or rejection of this hypothesis.

The prediction stated in the placement hypothesis is not unfounded, even though it does not appear to be empirically validated. Much in the way of opinion support can be found. For example, a 1968 publication of the U.S. Department of Health, Education, and Welfare states that schools that have accepted the responsibility of locating placement services within their facilities are far more successful than those that have not done so. This is a bold statement and it should be investigated. With suitable guidelines and training, selected placement and follow-up program personnel could collect evidence to answer questions of accountability underlying such a statement.

Regarding the availability or quantity of school-based placement and follow-up services, the literature review produced few references, and most of them were indirectly related to the question of availability of services. This review suggests that any attempt to investigate the impact (or lack of effect) of these services must give careful consideration to the amount of services available to meet clients' needs and it emphasizes the discouraging lack of useful data in this area.

As to whether schools should realign their programs to include placement and follow-up services as integral parts of a comprehensive set of practical career guidance offerings, the consensus in the literature is that not only do schools need to be realigned to provide more adequate placement and follow-up services to youths, but also that community resources (including human talents) must be organized to integrate closely with school programs and plans. In fact, it seems appropriate to conclude that the entire education-community relationship requires careful reassessment and improvement.

f. Recommendations

The recommendations below are based on the reactions of this chapter's authors to the literature they reviewed.
1. The most important recommendation in this chapter stresses further coordination and integration of all career planning and development resources for students. Placement and follow-up services should be critical ingredients of a comprehensive set of practical career guidance and counseling services that should be available to all students in each school. Too frequently, placement is separated from follow-up services, while both are separated from career guidance and counseling. These piecemeal efforts do not support a continuous, developmental approach to youth careers. Systematic synthesis of effective component programs and services must occur. Exclusion of schools from responsibility for one or more areas of career placement and follow-up would excuse school counseling personnel from at least partial accountability for all aspects of students' career planning and development; would leave too many planning and development factors to chance. This recommendation needs at least two clarifications. First, follow-up services should entail more than data collection on students who have received placement assistance. Follow-up help should be provided to youths so that they maintain the career development progress in effect before they were placed. Second, both types of follow-up—data collection and further career guidance—are expensive. All schools need to provide the long-term assistance; therefore, staff and budget priorities will have to be reconsidered. However, all schools should not need to conduct data collection activities. It is impressive to review efforts such as the annual five-year follow-up of vocational students conducted by the Special School District of St. Louis County, Missouri. The objectives of that follow-up study are:

1. To locate the student in regard to place of employment, branch of service, name of school, or other activity.

2. To secure the job title, service classification, or course of study.

3. To obtain from those employed the monthly rate of pay.

4. To consider the experiences of former students with a view toward assisting in the guidance and counseling of future students.

5. To procure information to be used for curriculum improvement, such as expansion, reduction, and relevance.

Whether or not each school and district needs to conduct such studies should be investigated. It might be found that with state and federal leadership, a minimum number of follow-ups could be conducted for selected schools using stratified random selection procedures. Follow-up formats could be streamlined and standardized to reduce costs and to collect only data known to have the largest probability of potential impact on program evaluation and improvement and on decision making of current students.
2. Consistent with writers such as Circle (1967), it is recommended that if student placement and follow-up become integral parts of each school's practical guidance services, such services must not exclude participation of and cooperation with state and local public employment services and any other public or private agency providing youth with these services. Educational institutions and such agencies must assume joint responsibility for placement and follow-up. If they accept that in the vocational aspects of career they both must be held accountable for placement of youths, this acceptance should force them to seek out feasible alternatives for improved cooperation. It is very possible that the desired coordination between schools and public employment services in particular will not occur unless steps are taken to provide federal and state legislation mandating such changes.

3. Placement and follow-up services must include career planning assistance and follow-up for all areas of careers. "Career" is defined here as including not only vocational and educational choices but also decision-making in other life areas such as the consideration, selection, and pursuit of leisure, personal and social development, and social responsibility (or citizenship) options. High priority attention invariably will have to be directed toward facilitating student placement and development in school and work settings, but the other areas of the broad concept of "career" should not be ignored. This comprehensive definition of placement and follow-up stresses providing assistance whenever youth make a major transition in school (e.g., from one academic level to another) or upon leaving school (e.g., early leaving or graduating). Graduates appear to be receiving most of the resources of those schools which provide placement services.

4. In regard to expressed needs for schools to realign their programs to provide better placement and follow-up services as well as to improve school-community agency relationships, there is also a need for specific guidelines as well as models of prototype placement and follow-up services that not only demonstrate exemplary features but also provide training assistance to educators and community representatives who need help in realigning and rearticulating their resources and services. A series of guides and prototypes should be available for placement and follow-up activities for youths in each area of student career planning and development. It seems that practitioners who have developed exemplary placement and follow-up services have not had the opportunity to document and disseminate their procedures and products. Cost feasible alternatives need to be shared. Innovative approaches need to be made visible so that school and community representatives who are unaware of critical youth needs for placement and follow-up assistance can be stimulated to develop services aimed at meeting these needs. In order to improve school-community relationships, (a) schools should list the different types of staff and student needs that members of the community can help resolve by providing certain resources and engaging in specific activities and (b) community representatives should disseminate to schools the types of assistance they are willing and able to provide to assist youth career planning and development. Such listings would be most useful if the services and resources were described in the form of measurable objectives so
that potential resource persons and users could understand the nature and extent of commitment needed or offered. Alternatives listed would include placement and follow-up services for all career areas.

5. It is recommended that directors of existing and planned placement and follow-up services be given guidelines and illustrations for, and be trained in, the systematic design and implementation of their services in a manner conducive to collection of reliable evaluation data. Placement and follow-up coordinators require specific techniques for determining measurable youth needs in each category for which accountability data are desired, for collecting and analyzing data related to each need, for establishing and using decision rules for determining the percentage of needs met in each category, and for evaluating cost-benefit ratios for each category. Such decision making must attack constraining factors which inhibit the improvement of placement and follow-up services in schools. For example, not all administrators agree that schools should be involved in providing such services. Guidelines and highly individualized training which can be administered individually or in small groups and which is tailored to placement and follow-up programs will further increase the probability that reliable evaluation data will be obtained. If these directors seek to improve their services as a result of receiving training in systematic planning and evaluation techniques, they will recognize the necessity for using data on youth career planning and development needs to:
   (a) set priorities for all practical career guidance services and
   (b) consider a wide range of alternative strategies for delivering such services. If such strategies are limited to the use of counselors, the required placement and follow-up services probably will not be provided unless counselors are relieved of some of their current responsibilities, additional counselors are hired, and counselor training emphases are changed. It appears that the career placement and follow-up needs of youth are not being met. Giving school counselors more time and training focused on such needs is only one of many strategies for meeting those needs. For example, cooperative and work experience staff and programs appear to be performing an effective role in job placement, especially of noncollege-bound youths. Guidance resources must be coordinated with such within-school services. Training counselors to perform increased placement and follow-up functions might not be the most cost-efficient strategy. Alternative ways for meeting student needs through the cooperative use of resources of schools and community agencies need to be investigated. Perhaps each school does not need to have its own services but could share resources with other schools. This is the case in the Cooperative Education Clearinghouse established in the Phoenix, Arizona valley since September 1972.

6. Any attempts made to improve the evaluation of key placement programs should give serious consideration to assessing such elements as:
   (a) the extent to which each placement matches each youth's needs, goals, and characteristics;
   (b) the immediate and long range satisfaction that the youth has on that job; and
   (c) the immediate and long range job "satisfactoriness" demonstrated by the youth. Most investigators and program personnel who use placement success as a criterion not only limit it to job finding but also concentrate on the number of
actual placement contacts made. The multivariate evaluation procedure recommended here will be much more expensive than the prevailing approach based on the number of placements. However, feasibility studies could be employed to reduce the costs of these procedures and evaluation studies could be concentrated on a few highly visible but representative programs.

7. In light of the lack of data on the quantity of available placement and follow-up services, a few fact-finding studies in a sample of states, or regions within key states, should be conducted by impartial investigators. If in-school, in-district, and community agency services for placing and following up youths are as limited as the literature implies, limited funds should be assigned to such studies. Key studies could provide the data which apparently have not been collected up to the present. Such studies are both desirable and feasible, and they could have practical implications. Before such studies are initiated, careful consideration should be given to conceptualizing a classification system for analyzing different types of placement and follow-up programs. A systematic approach for classifying services is needed and it should be built into the guidelines recommended above. It should provide operational definitions of how each category of services differs from any other. It should include descriptions of prototype programs that exemplify each category. Some such illustrations are briefly reviewed in Section d of this chapter.

8. There is a critical need for controlled experimentation on key realignment alternatives for placement and follow-up services. As should be apparent from the lack of objective data supporting realignment attempts summarized in Section d of this chapter, there has been no experimentation for the purpose of selecting cost-efficient strategies for specified youths under specified school conditions. This appears to be a major area for future research and development activities.

9. If schools continue to consider realigning their programs and their community relationships to improve youth placement and follow-up services, one approach that should be given serious consideration is to help employers change their educational credentialing requirements. Berg (1970) voices serious concern over problems related to industry's rising demand for workers who have more elaborate educational credentials. He believes that this demand may be in response to the available supply of potential employees rather than to long unsatisfied organizational needs. He deduces from his own data and his extensive review of research that employers appear to believe that the more years of schooling an employee has the greater his potential for employment in higher-paying, more skilled, and responsible jobs. Berg suspects that "there may be a significant margin of education that goes beyond what employers need even for good plant and corporate performance." (p. 80.) Berg arrives at a significant conclusion when he recommends that educators must help employers establish more realistic employment requirements and that steps must be taken to promote such changes on local, state, and national levels. Educators
should take the lead in helping employers make these changes. In fact, educators should take leadership in initiating, building, and maintaining interagency cooperation and interdependence not only on the topic with which this recommendation deals, but in all school-community improvements discussed in Recommendation 2.

10. Community agencies that provide placement alternatives for youths should ensure that facts describing these options are systematically made available in the educational and vocational planning areas. Improved ways of screening, collecting, and disseminating more meaningful facts must be explored; more time, space, and personnel must be allotted so that facts are continually updated. The Economic Development Council (1972) makes a challenging suggestion for one possible solution to the communications gap between the preparation process (in schools and training agencies) and employers. Serious consideration should be given to its recommendation that in each city or town:

A major over-all personnel agency and research bureau should be established under business auspices to ascertain the needs of employers, transmit them to the schools and training agencies, set minimum standards for skilled and entry level employment, and refer those who meet these standards to companies where openings exist. (p. 6)

Possibly called a "job opportunities center,"

This agency would have these main functions: (1) to survey the employment needs of the business community, present and future, and maintain a continuous inventory of the number and kinds of available jobs, (2) to set standards for determining the suitability of candidates to the various types of skills required and also to specify basic minimum entry level qualifications, (3) to conduct interviews for positions at all levels and refer those considered eligible to companies having vacancies, and (4) to follow up on the hiring and retention rates of candidates from the various schools and training programs, thereby checking their effectiveness. Since much less interviewing would be needed at the headquarters of participating companies, little, if any, increase in personnel would be required....Over-all, we would thus be creating a city-wide private sector "job bank" and, in time, a responsive "personnel bank" to break the blockage between supply and demand. (pp. 7 and 8).

Feasibility studies should be conducted to determine the costs and benefits of implementing such centers in cities and towns of different sizes and complexities. This alternative might not be feasible in metropolitan areas, but variations of its basic approach might be adapted.
Chapter 4
COMPUTERIZED AND ALTERNATIVE APPROACHES
TO PROVIDING CAREER INFORMATION

5. CURRENT EXPERIMENTS WITH THE COMPUTERIZATION OF INFORMATION FOR COUNSELING AND GUIDANCE PURPOSES DO NOT APPEAR TO BE COST-EFFECTIVE; OTHER MEDIA, METHODS, AND MATERIALS MUST BE DEVELOPED TO PROVIDE CAREER INFORMATION.

In reviewing literature related to computerized and alternative approaches to providing career information, the primary search focused on computerized attempts to meet career guidance, counseling, and placement needs of youth, especially noncollege-bound secondary students. Secondary attention was directed to other media, methods, and materials that have been developed or could be designed to serve these same functions. As in other chapters of this report, the review stresses literature published since 1968; however, germane manuscripts produced before that date were also considered.

The discussions of key issues that constitute the bulk of this chapter (see Sections b and c) are based on the assumption that career planning and development of youths is facilitated if they possess and can use the best facts and information available, especially in the areas of educational and vocational choice. This assumption leads in turn to the assumption that practical career guidance services should therefore provide such facts and information. Both Chapters 1 and 2 of this report refer to the need noncollege-bound youths have for reliable and timely career guidance facts and information.

Only one statement was found that seemed to challenge these assumptions. Mangum (1971) suggests that making more and better facts and information on labor market trends available through school curricula would have little effect on the response of vocational education to the changing occupational structure. He believes that providing students with more knowledge will be relatively ineffective if problems of funding, institutional resistance and inertia, and uncertain objectives for vocational education curricula are not resolved first. Obviously, he does not challenge the importance of such knowledge for youth career planning and development. Therefore, these two assumptions are accepted without further discussion. However, before the two major topics of this chapter can be presented, four fundamental questions must be resolved:

1. What do the terms "facts" and "information" mean?
2. If career is defined in terms of life planning and development, in what career areas are approaches needed to provide facts and encourage the development of information?
3. In what aspects of career planning and development within each career area are such approaches needed?
4. What is the nature of the domain of alternative media, methods, and materials for enabling youth to interact with facts and information?
a. The Concepts and Mediation of Career Facts and Information

(1) Definition of Terms

One important aspect of the above two assumptions relates to defining facts and information. Most writers do not distinguish between the two terms. However, Tiedeman (1972a, 1972b; Ellis & Tiedeman, 1972) presents an impressive statement for making such a distinction. In fact, he constructed both a theory of vocational development and a computer-based guidance system compatible with the two definitions. Tiedeman (1972b) equates facts with data and emphasizes a desirable evolution from facts or data to information.

Facts/data are turned into information by the inquirer within the context of decision-making. (p. 147) Facts/data about education, military service, occupation, and family living can be turned into tacit information for career navigation. This occurs through the interactional mediation of inquirer and system on a repetitive and long-term basis. (p. 150)

Tiedeman's separation of facts and information not only recognizes the importance of youths working with a data source and evolving the available facts so that they become information for use in career decision-making, but also provides a worthwhile distinction for surveying the realm of current and possible approaches to helping youths obtain and use facts and information. The hypothesis that introduced this chapter refers only to information. Yet, many computerized and alternative media solely dispense facts and do not take responsibility for helping youth evolve those data into meaningful information. Rosser (1969) summarizes various computer-based college selection systems, all except one of which are examples of basic facts media. McKinlay (1970) provides an example of an approach that goes beyond this type of facts medium. He describes the Occupational Information Access System developed by the University of Oregon. It not only attempts to provide students with labor market data but also to present a series of student-machine interactions referring users to cassette tapes of recorded interviews about occupations, printouts of localized occupational information, printed lists of general and specific references on occupations, and files of persons to be contacted by users who want subsequent interactions with occupational representatives. Tiedeman (1972a, 1972b; Ellis and Tiedeman, 1972) in his Information System for Vocational Decisions (ISVD) undoubtedly provided the most sophisticated model of a computerized system designed to encourage extensive interactions between machine and users. In fact, ISVD "inquirers," as Tiedeman and his colleagues prefer to call them, were able to progress beyond mere facts and into career information while using their own unique communication words and patterns.

This chapter accepts Tiedeman's distinction between facts and information. It reviews documents that describe approaches providing facts/data as well as approaches that can be classified as information systems. This dual emphasis is maintained even though the chapter hypothesis seems to refer only to information systems. It is believed that the hypothesis probably was formed without this discrimination in mind and therefore refers to both categories of media, methods, and materials.
(2) Career Areas for the Dissemination of Facts and Information

In this chapter, the sample approaches for disseminating facts and encouraging the development of information are limited by those that have been documented in the available literature. As a result, only approaches that seek to extend individuals' knowledge in career areas of educational and vocational decision-making are discussed. However, it is the intent of this chapter and other chapters in this volume to present the issues and illustrations in the context of what is possible in all aspects of career (i.e., life) development, even though few examples of approaches that go beyond school and job facts and information are available. These few examples primarily depend on printed media and do not include computerized services.

(3) Aspects of Career Planning and Development Relating to Dissemination of Facts and Information

Even when computer and alternative approaches within the educational and occupational areas are described, there is a tendency to believe that they provide facts and information related only to the world of work or the realm of education and training options available to youths. This chapter does not maintain this restriction, and it is not common in the literature, O'Hara and Tiedeman (1971) limit their discussion to the use of media as means or vehicles in vocational development that help individuals turn occupational facts/data into personal information. However, Weiss (1968) provides a more comprehensive example when he reviews innovative computer-assisted strategies that individualize students' personal assessment procedures and data by helping them synthesize such data with those patterns available on various occupational options. Stiller (1970) generalizes such applications to all media rather than just to computers. He points out that it is in the field of fact-dispensing that media have their most immediate impact. At the same time, he identifies media applications in student appraisal, counseling, and orientation, all of which can be used to assist counselors to perform their functions better by shifting to media those tasks that can be performed more efficiently by such media. Stiller seems to agree with the Tondow-Betts (1967) estimate that counselors spend 85% of their time dispensing information that could be handled by a multimedia support system.

A comprehensive information system (of which no examples could be found other than ISVD) could include facts and information on:

- Each individual's personal assessment characteristics (abilities, interests, values, physical features, and personal and social behaviors).
- The status of an individual's problem-solving and self-management skills.
- His past and current short and long range goals and plans.
- His academic history.
- The assessments that others in his environment (e.g., school staff) have made of various aspects of his career skills and functioning.
The range of career (e.g., occupational, educational, and training) options available.

Relationships among different patterns of personal characteristics and actual membership, satisfaction, and success in different career options (e.g., occupational clusters or families).

State and local legal requirements that must be considered when career decisions are made.

Resources available within the instructional system to help each individual achieve his career goals.

Although no system incorporates all these kinds of facts and information, it is assumed in this chapter that such a system must be available if youths are to receive assistance with all aspects of their career planning and development in each career area. Approaches that provide some of these kinds of facts or information are reviewed here.

(4) The Domain of Media, Methods, and Materials

The domain encompassed by the term "media, methods, and materials" also needs clarification. As should be apparent from the above discussion, this chapter includes computer approaches in this domain. The remainder of the domain is limited only by the media designer's creativity. This domain has been well charted in the literature. Handville (1954) lists 21 ways of disseminating what this chapter would classify as occupational facts. Such media, methods, and materials include school assembly presentations, bulletin board displays, career booklets, career days, career newsletters, clubs, the Dictionary of Occupational Titles, exploratory experiences, film strips, group discussions, job analyses, library guidance corners, motion pictures, occupational classes, occupational files, placement services, career speakers, school subject-occupation relationships summarized on wall charts, visits to places of employment, surveys of jobs in the community, and worker interviews. Thompson (1967) moves toward more discrete categories of media by listing and defining 10 groups: publications, audio-visual aids, programmed instruction materials, computer-based systems, interviews, simulated situations, synthetically created work environments, direct observation, direct exploratory experiences, and on-the-job tryout. Lewis (1970) proposes an even more systematic classification scheme by focusing on three sets of media characteristics: (1) sensory channels (i.e., sight, sound, sight and sound, and manipulation), (2) method of use (e.g., independent study and storage and retrieval systems), and (3) phenomena (e.g., games and simulations).

Herr & Cramer (1972) review research and discuss concerns related to different principles for using information effectively in vocational guidance. They summarize issues of motivation, evaluation, and student use patterns, and then review different information delivery systems. This appears to be the most up-to-date and comprehensive survey available. Their categories include printed matter, other media (e.g., television, bulletin boards, slides, films, film strips, and microfilm), formal group approaches (e.g., classes, career days or nights, and vocational panels), interviews, simulations (e.g., role
playing, vocational development lessons, problem-solving kits, life career games, career clubs, and workbooks), field trips, formal curriculum approaches, direct experience, and computer systems (19 are listed, many of which are not currently operational). Herr and Cramer conclude their systematic survey with a discussion of the provision of occupational information (1) at the elementary school (since the above delivery systems have been developed primarily for secondary students) and (2) for dropout and terminal students. Perrone & Thrush (1969) expand on Herr and Cramer's list of computer systems and also identify other projects in their survey of 19 "vocational information processing systems."

One of the best analytical (although comprehensive) surveys of media, methods, and materials is that recently published by Willingham, Ferrin, & Begle (1972). As illustrated by their tables (reproduced on the next two pages), they divided media into two categories: (1) computer-based and (2) others (e.g., film, microfilm, videotapes, telephone systems, simulations, and aperture cards). For each category, they identify the major guidance functions of such technology and for each function they list what they perceive to be its goals, services to students, current status of research and development, likely future developments, and examples of approaches.

These charts and the aforementioned surveys indicate that the domain of media, methods, and materials focusing on career facts and information is extensive and creative. Recent years have seen exciting innovations in the use of multimedia support systems (e.g., Burnham, Johnson, & Youst, 1970, and Martin, 1967), films (e.g., the Denver Public Schools in 1972 produced 10 career guidance films that are used in a series of 24 thirty-minute television career guidance programs and Doubleday Multimedia's "Careers in the '70s" series of 13 career guidance films received supportive evaluations in a study reported by Mitchell, 1972), microfilm aperture readers and cards (e.g., Stewart, 1969), comic books, audiotaped and videotaped interviews with workers, and learning activity packages dealing with all necessary elements for the individualization of a single career guidance activity or a set of related activities. It appears that the development of innovative approaches to media, methods, or materials is not an urgent need in this domain.


This chapter's hypothesis assumes that approaches used to present facts and information for career guidance and counseling of youths in general and noncollege-bound youths, in particular, should be cost-effective and that cost-effectiveness is measurable. Although it is tempting to accept both of these assumptions without further discussion, the literature contains suggestions that there is considerable reluctance regarding such acceptance.

The basic concern again is the definition of terms. Wilkinson (1972) uses the concepts of "cost-effectiveness" and "cost-benefits" while operationally defining cost-benefit analysis as:
### Role of Technology in Guidance

<table>
<thead>
<tr>
<th>Functions of Technology in Guidance</th>
<th>Goals</th>
<th>Services</th>
<th>Current Status</th>
<th>Likely Developments</th>
<th>Examples</th>
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<tbody>
<tr>
<td><strong>Computer-Based</strong></td>
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<td><strong>Vocational Information</strong></td>
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<tr>
<td>Provide up-to-date information on general and specific career opportunities and on student career interests</td>
<td>Help counselors know students' career interests</td>
<td>Considerable experimentation done, but school districts slow to pick up workable models despite widespread acknowledgment of utility</td>
<td>County/state manpower agencies will move toward integrated listings of job openings; school districts will begin to develop, albeit slowly, interactive systems for usage of both counselors and students</td>
<td>CVIS</td>
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<td><strong>Educational Information</strong></td>
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<td>Provide information on a range of postsecondary education alternatives, seeking to match individual interests and abilities with institutional offerings and environment</td>
<td>Information on institutional programs and characteristics; Allow student to weigh characteristics according to importance to him; Give student list of institutions that match his indicated abilities and interests; Provide probability statements on chances for admission</td>
<td>Although a large number of national collegeLocator services were established in the 1960s, very few exist now. A few interactive systems are in operation around the country, but they touch very few students so far</td>
<td>Students increasingly will seek information on a variety of postsecondary education options, not just colleges. Further, they will seek them in conjunction with information about specific careers</td>
<td>CLS, CVIS, ECES</td>
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<td><strong>Training in Planning Skills</strong></td>
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<td>To increase competence in the process of making informed and rational career decisions</td>
<td>Cause students to examine their values; Enable them to interpret relevant data accurately; Lead them to explore options systematically; Help them formulate and test tentative plans</td>
<td>Largely in the experimental stage, but some projects that did produce operational systems are currently shelved</td>
<td>By and large secondary school systems will probably utilize written materials and poring techniques rather than computerized systems</td>
<td>SIGI, probably the only example, even though it is geared primarily for community college students</td>
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<td><strong>Academic Advising</strong></td>
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<tr>
<td>To help students plan their academic programs in line with expressed interests, abilities, and career goals</td>
<td>On-line course registration; Long-range course planning; Interpretation of past achievement and test scores in light of expressed interests and goals; Predict chances for admission and likelihood of success at selected postsecondary institutions</td>
<td>There has been considerable experimentation in each of these service areas over the past 3 years, but currently most operations are located within postsecondary institutions</td>
<td>Secondary schools will tie into and profit from current university experimentation, particularly with respect to course registration and planning</td>
<td>Broward Junior College (Florida) CVIS</td>
<td></td>
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<tr>
<th>FUNCTIONS OF TECHNOLOGY IN GUIDANCE</th>
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<th>CURRENT STATUS</th>
<th>LIKELY DEVELOPMENTS</th>
<th>EXAMPLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>COUNSELING</td>
<td>To provide a system that would sensitively listen to counselors, analyze communications, and respond appropriately</td>
<td>Privileged communication to facilitate openness, bring objective information about the student to bear on the problem or issue, take student through systematic, analytical process</td>
<td>Not much going on</td>
<td>Not much in the near future</td>
<td>AUCOM was one of the best examples, but it was an experimental project: funding ended in 1968.</td>
</tr>
<tr>
<td>EDUCATIONAL MONITORING</td>
<td>To keep an up-to-date record of progress of students toward personalized, stated goals.</td>
<td>Provide information on a student's background, academic progress, test results, nature and frequency of contacts with professional staff, and other variables; aid student in career planning through use of above information; enable professional staff to monitor individual and group progress and spot problem areas</td>
<td>Early in developmental stage; most interesting projects are part of total individualized instruction systems; staff rather than students are primary users of information currently</td>
<td>Although total individualized educational systems will probably be several years in coming, various elements of students' records will increasingly be stored in a computer in easily retrievable form</td>
<td>PLAN is a total individualized educational development system, one of the very few in operation. See also Hughson (California) School District.</td>
</tr>
<tr>
<td>VOCATIONAL INFORMATION</td>
<td>To provide students with concise but thorough information about the nature of local job opportunities and the necessary access procedures</td>
<td>Give detailed information on job openings, earnings, requirements, employer addresses, the nature of the actual work performed, etc.; provide taped interviews with those in fields of interest; make available data on supply and demand; students investigate job areas by making their own films or videotapes</td>
<td>The VIEW system using IBM-type aperture cards and written reports is being adopted throughout California and within other states. Also, a variety of other local and county systems are underway throughout the nation</td>
<td>The need for localized specific career information is widely recognized; usage of programs and materials that meet this need will spread rapidly</td>
<td>San Diego Career Guidance Centers provide several services including VIEW and Dial-a-Career.</td>
</tr>
<tr>
<td>EDUCATIONAL INFORMATION</td>
<td>Identify and describe those institutions that have programs and characteristics suited to a student's interests, abilities, and career goals</td>
<td>Information on institutional programs and characteristics; provide &quot;human&quot; descriptions of institutional environments</td>
<td>Although many institutions have produced films about themselves, they are intended for large presentations or for general audiences, and therefore are used infrequently as a source of educational information by potential applicants. Most information continues to come to students from books and pamphlets</td>
<td>Insofar as educational information is related to career-information programs, the primary development will be describing career-training programs and local institutional offerings</td>
<td>San Diego Career Guidance Centers provide several services including VIEW and Dial-a-Career.</td>
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</tbody>
</table>
...the comparison of all the relevant resources (such as dollar value of personnel, equipment, etc.) required to achieve an object-ive with the likely benefits (dollar value of results) to be obtained from achievement of the objective in order to aid in managerial decisions as to the desirability of initiating or con-tinuing a program in light of long-range time and social considerations. (p. 35)

Also occurring in the literature is the concept of cost efficiency, which sometimes is used in the same way that Wilkinson employs the term cost-effectiveness. To resolve this apparent overlap, this chapter uses these three concepts as follows:

- **Cost-effective analysis** entails a comparison of the degree to which a single strategy or approach meets its predetermined objectives using specified resources required to produce those outcomes.

- **Cost-efficiency analysis** is determined in the same way that Wilkinson operationalizes cost-effectiveness, since it entails a comparison of multiple strategies or approaches as related to their separate input resources. Such studies of alternative approaches must evaluate those approaches primarily on the basis of objectives they have in common.

- **Cost-benefit analysis** entails not only looking at the achievement of desired outcomes (as specified in predetermined objectives) but also the desirability of each objective in the light of what Wilkinson calls "long-range time and social considerations," as well as in the light of the occurrence of unexpected side effects (positive and negative) of each approach.

A sequential relationship is apparent for at least two of these three concepts. It must be possible to conduct a cost-effectiveness analysis of an approach to compare it with other approaches in a cost-efficiency study. At the same time, different levels of cost-benefit analyses could precede or follow either single-strategy or multiple-strategy analyses.

Implementation of the above three concepts is the critical problem. Concerns such as the two discussed below indicate that some guidance, counseling, and educational technology experts are reluctant or even firmly opposed to conducting even the most rudimentary cost-effectiveness investigation of educational technology and career facts and information approaches.

(1) **Inappropriateness of Cost-Effectiveness Analyses**

Part of the concern over the inappropriateness of cost-effectiveness analyses relates to the belief that most strategies and approaches are in their early developmental stages and should not be subjected to cost or impact surveillance until they are more fully developed. Grayson (1972) states this point of view succinctly when he concludes that for all applications of technology in education, cost-effectiveness should not be an issue in the research and development stage since it is a valid measure only in terms of operational systems.
Tickton & Kohn (1971) conducted a survey of various new instructional technologies and found evidence that illustrates the above concern as well as implying that cost-effectiveness analyses of technical approaches should never be conducted. They conclude that:

...there were no convenient measures of cost-effectiveness. Specialists in the field of educational television, radio, programmed instruction, computer-assisted instruction, etc. had not sought such information...The attitude was that instructional technology was a tool of learning, very much as a school or university library is a tool of learning. No one asks if a library is cost-effective. No one asks if Harvard would still be Harvard if the Widener Library had only half the volumes. So, goes the argument, why raise the question about films, tapes, and television. (p. 6)

(2) Measurement Problems in Employing Cost-Effectiveness Analyses

A second reason for reluctance stems from recognition of measurement problems entailed in designing, conducting, and analyzing data from and reporting even basic cost-effectiveness analyses. Grayson (1972) reviews the problems of assessing benefits (including specification of goals and objectives and selection of appropriate instruments to measure the degree of attainment of these goals and objectives), analyzing costs, and determining the relative efficiency of comparable strategies. Wilkinson (1972) focuses on the problem of analyzing costs and concludes that:

...most data on the costs of instructional technology lack the necessary scope and depth to help education's managers make policy decisions. (p. 34) ...This article has pointed out only a few of the many areas where information is needed for the cost analysis of instructional television. The same type of questions need to be answered for all technological instructional strategies if the needed cost-effectiveness and cost-benefit studies are to be produced. Most of these questions focus on the accurate description of actual costs, which is the essential data base from which the predictive and comparative studies must be constructed--the MISSING data base. (p. 38)

Wilkinson demonstrates a design for cost analyses of educational strategies. In fact, he concludes on an optimistic note suggesting that if pertinent cost data are available, similar analyses can be conducted on any strategy. This problem of cost estimates is also identified by Tickton & Kohn (1971). From their survey, they conclude that data that are usually available for computation of costs are not satisfactory (since accounting procedures are not uniform among districts; cost data are not comparable, and classifications of costs, calculations of unit costs, and estimates of savings are usually made in arbitrary ways).

Lewis (1970) does not touch on these issues of costs when he discusses problems related to conducting comparative studies of media systems. He lists three major obstacles to such evaluations:
1. The number of variables existing in classrooms where media studies usually are conducted.

2. The vagueness of most educational objectives.

3. The versatility of media (in that each medium can be used for a wide range of purposes, therefore making it difficult to separate out for evaluation a single use in any one instance).

Lewis is less optimistic than Wilkinson. He concludes that the possibility of proving which is the most effective medium is remote and recommends that concentration be placed on making the goals and objectives of instruction as specific as possible, then selecting media and materials to achieve those desired outcomes.

The preceding discussion of two concerns related to the implementation of basic cost-effectiveness studies does not deal specifically with career fact and information dissemination approaches. However, there seems to be little reason to believe that statements applied to educational technology in general would not be appropriate for different approaches to career guidance technology. The hesitancy of Grayson (1972) is reflected by Roberts (1969), a computer-guidance researcher, who does not directly address the issue of cost-effectiveness studies but in passing makes a statement that seems to represent the stance of most computer innovators in this field. Roberts states that:

Of greater concern than the problems of applicability, cost, and simplicity, many of which exist and are important, are those relating human behavior and function. More specifically, this refers to the behavior of a human counselor who functions as a transmitter of "useful information" and information that will help students make intelligent decisions. (p. 13)

It appears that this type of priority has been established frequently in regard to automated guidance approaches. However, as illustrated below, there are exceptions.

Godwin (1969) has been involved in many of Educational Testing Service's research and development efforts in this field. The following quote indicates that he believes that at least the cost issue should be faced much more directly:

These comments are not intended to suggest that the simplest and least expensive way is the best, or that all new fangled devices are to be avoided!...However,...the complexity and expense are very real factors in this area and they ought to be weighed heavily in considering alternatives. Schools often operate with limited budgets, budgets which will not support excessively expensive systems. Nor is the financial picture likely to improve in the near future. To produce an automated guidance system, however magnificent, which is beyond the reach of most schools is surely no help to the average guidance counselor. To produce a system which schools can barely afford by draining funds and manpower from
other critical areas imposes on us the obligation to be certain that their funds are as well spent as possible, and that the system carries no unnecessary luxuries. (p. 76)

The extensiveness of such attempts to collect evidence on the costs, impact, cost-effectiveness, cost-efficiency, and cost-benefits of automated and non-automated approaches for disseminating career facts to youths and helping them acquire and use career information is reviewed in the next section of this chapter.

c. Evidence on the Costs and Impact of Facts and Information Dissemination Approaches

The hypothesis that directed the literature search summarized in this chapter alludes only to cost-effectiveness analyses. However, a search was initiated for single-approach cost-effectiveness, multiple-approach cost-efficiency, and cost-benefit studies. In fact, especially for computerized approaches, the search attempted to identify attempts that have been made to identify the costs of such strategies or the impact they have had either on career guidance needs of youths in general and noncollege-bound youths in particular, or at least on the system needs of the institutions in which they are applied.

Much of the research and development work on career facts and information approaches, especially in the area of automated strategies, appears to be based on the premise that innovative media, methods, and materials are, or will be, more cost-effective and beneficial than existing alternatives. This literature search found little empirical data to substantiate that premise. As noted at the end of the preceding section, most innovations in this area either have not been analyzed to provide such costs or impact evidence or are in early stages of basic research that are inappropriate for premature evaluations. Approaches that are supported by any type of reportable evidence are summarized below.

(1) Nature and Extent of Evidence on Career Facts and Information Approaches

Ross (1971) discusses the only attempt found in the category of multiple-approach studies aimed at cost-efficiency analyses. He conducted a comparison of two approaches for delivering occupational information in an Oregon community college: the computerized Occupational Information Access System (OIAS) mentioned earlier in this chapter and the regular counseling staff. By mailing questionnaires to randomly selected students who had used either of the approaches during the 1970-71 school year, Ross was able to compare their responses on two dependent variables: (1) attractiveness of each approach and (2) each approach's impact on students' career plans and certainty. He found that students were equally satisfied with the two approaches but that counselors had more effect in terms of the second variable. Ross explains the latter finding by saying that it should not receive much attention since the two approaches had different objectives and users had different motivations for using each strategy.
Ross initiated a further aspect of the comparison of his two approaches by developing a checklist (using five-point rating scales), which he used to evaluate each strategy on these eight dimensions:

1. Makes information available to persons of varying ability and experience levels.
2. Provides means for integrating occupational information.
3. Delivers information through various media.
4. Displays or delivers information attractively.
5. Supplies local as well as national data.
6. Provides accurate and current information.
7. Provides information concerning a wide variety of occupations.
8. Includes specific information on occupations such as duties and hours.

Overall, Ross rated the OIAS well ahead of counselors; the counselors excelled in none of the dimensions but received equal ratings on dimensions 1, 2, and 7.

As a result of his attempts to obtain information on comparative impact and costs, Ross speculates that a 50% decrease in student search time and a similar decrease in counselor time is gained through the OIAS. Further, he estimates that the OIAS costs $3.51 per user for full time use, while counselors cost $44.65 per user on a similar pattern. Ross outlines cost models for each approach and concludes that these models:

...indicate that the OIAS delivers occupational information at less than 10 percent of the corresponding cost per user of the Counseling Center. OIAS is, in fact, much less expensive than counselors as a system for delivering occupational information. (p. 12)

Although this conclusion seems rather strong, this is truly a pioneering study, perhaps lacking in research rigor but heading in a direction that seeks to provide empirical data of critical relevance to this chapter's hypothesis. However, it should not be concluded that this hypothesis should be rejected on the basis of Ross' findings.

No other studies attempting cost-efficiency analyses were identified. Two computerized guidance systems, the Computerized Vocational Information System (CVIS) and the Education and Career Exploration System (ECES), have been subjected to preliminary evaluations entailing comparative designs. In addition, CVIS seems to have more specific and valid data on costs than any other sophisticated computer-guidance system. Data on costs are also available from two other automated approaches: the Interactive Learning System (ILS), which is basically a career facts/data dispensing strategy, and the system of Interactive Guidance and Information (SIGI), which is more of a career information development approach. Available data on the costs and impacts of each...
of these approaches are summarized below. None of these approaches is supported by cost-effectiveness, cost-efficiency, or cost-benefit studies (as defined in this chapter), even at the elementary level conducted by Ross (1971).

Among the more sophisticated automated career information systems, CVIS is distinctive in that it is the only one currently in operation on a daily basis with students, it is the only one for which cost-analysis data seem to be valid because they are based on daily operation, it has received more evaluation than other systems, and it is the only one that has widespread dissemination beyond the school district in which it was initiated. Harris (1973), the creator of CVIS, conducted calculations of CVIS costs and produced the following conclusion:

CVIS costs $18,000 per year for a six-terminal, two-printer installation which serves 3,450 students. Total cost divided by student enrollment yields a per-student cost of $5.30. Having a human counselor in the building for each student costs $60.00 per year per student. Total cost of the system per year divided by student users yields a cost of about $2.00 per student hour, and this calculation gives the administration a host of on-line functions at no extra cost. (p. 13)

These calculations indicate that computer costs per student are approximately 10% of counselor costs, which is consistent with the conclusion reached by Ross (1971) and noted earlier in this section. However, Harris' caution about not drawing any conclusions from this comparison seems appropriate. Such comparisons should be made only if the approaches being compared relate to the same objectives. Both Ross and Harris believe that the computers and counselors mentioned in their calculations did not have common objectives. Harris illustrates this noncomparability when she states that:

...computer systems are doing a job with vocational information which counselors have simply not done. Thus, computer-based systems have been largely an addition of services to the guidance department, not a replacement of services already being done by counselors. (p. 9)

Neither the Ross nor the Harris data on costs are sufficiently precise or appropriate to warrant rejection of this chapter's hypothesis; however, they do not support it.

Three evaluations have been made of the CVIS. All were doctoral dissertation studies, the most recent of which was Harris' own investigation. Melhus (1971) found that the CVIS and counselors did not produce differential effects on the occupational plans of sophomores with high levels of problem-solving ability, but that counselors influenced sophomores with low levels of ability to make significantly more changes in their plans than did the CVIS. Price (1971) compared the course registration effects of counselors and the CVIS. He found no significant differences between counselor- and computer-scheduled students on four dependent variables: (1) students' understanding of information relevant to course selection, (2) students' reactions to their course selection experiences, (3) evaluations of student course selections by a panel of five counselors, and (4) subsequent course changes made by students.
Harris (1972a) compared the CVIS with a no- (or regular counseling only) treatment approach on four dependent variables, all derived from students' responses to a Vocational Plans Questionnaire and a Career Development Inventory (CDI), which is described below. These variables are: (1) number of occupations that students report as options for them; (2) students' perceptions of the degree of congruence between their educational-vocational plans and their abilities and achievements; (3) the range and accuracy of students' occupational information; and (4) students' vocational maturity, operationally defined by composite scores on three scales of the Career Development Inventory (awareness of the need to plan, knowledge and self-reported use of career planning resources, and information on career decision-making). When both instruments were administered on a pretest and posttest basis, Harris found no significant differences between the effects of the CVIS and no (or regular) treatment conditions on the first two variables. However, she reports that the CVIS had significantly more impact in terms of the third and fourth variables (except for the decision-making subtest of the CDI).

The most recent evaluation of the ECES (Myers et al., 1972) produced similar results on the CDI. In fact, this led Harris (1973) to conclude that:

Use of present computer-based systems results in increase in awareness of need to plan and knowledge and use of resources, but not in decision-making skills. (p. 13)

That conclusion might seem premature to anyone who believes that: (1) Harris should caution the reader that these variables were operationalized only in terms of student self-reports on the CDI, (2) because it emphasizes such self-report reactions, the CDI might not provide a rigorous assessment of the vocational maturity variables it purports to tap, and (3) the CDI might not focus on the most important career planning and development behaviors or sample its areas adequately. As a norm-referenced instrument, the CDI lacks supportive data on its reliability and validity; as a criterion-referenced measure, it is not keyed to measurable objectives describing student career planning and development outcomes.

The CDI was not the only instrument used in recent evaluations of ECES (Minor, Myers, & Super, 1972). Myers et al. (1972) summarize the results of two years of field trials of this computer-based system in Flint, Michigan as well as the findings of an earlier one-year, preliminary field test in Montclair, New Jersey. In the most recent year of testing, the effects of the ECES were compared with (1) those produced by the ECES plus a counselor-led set of units preparing youth for career exploration and use of the ECES and (2) those produced by the regular guidance programs that tenth graders received in the participating high schools. The investigators administered the CDI to 10,000 students on a pretreatment basis to obtain 2,245 usable tests for the posttreatment comparison. They report significant differences between the ECES users and nonusers on two of four CDI variables: (1) orientation to vocational planning and (2) choice and use of resources for vocational exploration. These are the same two variables that produced differential effects in the Harris (1972a) study of the CVIS. Similar differences were found between students who used only the ECES and students who used counselor units plus the ECES. These results favored the latter group of subjects. Both groups of ECES users were "highly positive" about the ECES.
From their three field trials, the ECES investigators (Myers et al., 1972, p. 65-66) conclude that:

- Students who use the ECES "enjoy using it, find it easy to use, and feel that they benefit from it."

- These students "show small but clearly real gains in two important aspects of vocational maturity: planning orientation and choice and use of resources for exploration. ECES alone does not lead to gains in decision-making or occupational information possessed."

- Their parents are "pleased with it, want it to be available to the children, and--most important--become more involved in the planning efforts of their children."

- Their counselors "value it highly, estimate that it has a positive effect on students, and think it ought to be available to more students."

- "The more time a student uses ECES, the more gain the student shows in planning orientation and choice of resources for exploration."

- "When combined with a carefully planned program for developing decision-making skills, the use of ECES contributes to meaningful gains in planning orientation, choice of resources for exploration, and in the decision-making skills."

However, the ECES investigators do not report costs. Harris (1973) indicates that the ECES manual shows that the ECES hourly costs per student range between $10 and $16. This range is perhaps questionable since ECES is not in daily operational use in a regular school setting, although the CVIS is.

Similar caution must be exercised in reviewing the cost estimates of the SIGI and ILS. Developed under Katz' leadership (Katz, 1971), SIGI is currently being field tested at the community college level. Nothing has been published on the preliminary evaluations of this computer-based approach. However, Katz, Chapman, & Godwin (1972) declare that:

At present off-the-shelf prices, a typical SIGI installation with six student stations, built with the current generation of hardware, would cost a school between $2 and $4 per terminal hour. Indirect costs (space, power, and so on) might add another $1 per terminal hour to the total operating costs....The cost per terminal hour has been arrived at by assuming no use of idle machine time (evenings, weekends, or vacations). Thus, these SIGI cost estimates are upper bounds; the actual cost per terminal hour will be reduced in a number of ways. (p. 6)

The final computerized approach on which cost estimate information is available is the Interactive Learning System (ILS), which has three subsystems for disseminating different types of vocational and educational facts/data. Rosser (1969) contrasted the ILS College Suggesting System with similar services provided by 14 other systems in existence at that time. The ILS
rate averaged between $3 and $7 per student while the other systems averaged between $10 and $15 per student. Bishop (1971) presents a detailed subjective evaluation of the ILS and reports a cost of $12.50 per student for the college program, but he also reports that the ILS staff thought that they could reduce this cost to one-third by using newer hardware. Bishop concludes by recommending the ILS highly while predicting that it would cost districts on the East Coast about one-quarter the cost of adding a counselor to their staffs. However, it is apparent that no specific empirical data are yet available on the impact that ILS has on its users.

Evaluative data (Impelleteri, 1968) are available on one other computerized approach, the Computer-Assisted Career Exploration System (CACE), but these data are not summarized here because the system is no longer operational.

As was mentioned earlier, the literature review emphasized automated approaches since the chapter hypothesis stressed the computer medium. However, studies on other media, methods, and materials that dispense career facts and lead to career information were also surveyed briefly. Only one study, using a respectable quasi-experimental design to determine the impact of a noncomputerized approach, warrants mention. This was the previously referenced investigation that Mitchell (1972) conducted on the impact of the 13 career guidance films produced by Doubleday Multimedia. Although her study is more of a field test than an experimental research project, Mitchell illustrates the fact that evaluations of all media, methods, and materials in this field can and should be conducted. She investigated the impact of the films on the attitudes and self-reported behaviors of students in four schools where she used a pre-post, no control group design. Mitchell's study seems to be exemplary in that it: (1) focused evaluation procedures on objectives (even though they are globally stated and not too measurable) describing desired student outcomes; (2) collected data on a pretest/posttest basis related to these outcomes; and (3) reported results on each program objective. This study, which demonstrated that the films increased students' positive attitudes, provides an illustration for subsequent investigations using more rigorous evaluation designs, procedures, and instruments.

(2) Sample Career Facts and Information Dissemination Approaches Without Supporting Evidence

Many automated approaches in addition to those discussed in the preceding section have been developed in the past; some of these are currently operational and others are not now in use. These primarily deal with facts and information in educational and vocational areas of careers and comprehensively cover most aspects of career planning and development in these two areas. This chapter does not list and assess all such approaches; that has been done effectively in the literature—e.g., Rosser (1969); Bohn & Super (1969); Moorhouse (1969); Perrone & Thrush (1969); Scates (1969); Loughary (1970); Super (1970, 1973); Harris (1971, 1972a, 1972b); Herr & Cramer (1972); Willingham, Ferrin & Begle, (1972); and Miller & Tiedeman (in press). One major problem in studying this array of computerized approaches requires understanding important variables that distinguish one approach from another. The most useful scheme for organizing and comprehending computerized approach seems to be that presented by Miller & Tiedeman (in press). It is the same as that proposed by the Commission.
on Computer-Assisted Guidance Systems (1971) but deviates slightly from that employed by Harris (1972a, 1972b, 1973). The scheme categorizes computerized guidance systems into the following four groups:

1. Indirect inquiry systems (such as the college suggesting approaches summarized by Rosser, 1969, in which the user receives a response after the lapse of at least one day).

2. Direct inquiry systems without systems monitoring (such as the ILS College Guidance System, in which the inquirer interacts directly with the computer, which does not have personal data on him but which gives him immediate feedback).

3. Direct inquiry systems with systems monitoring (such as the CVIS, ECES, and SIGI systems, which enable direct interaction and immediate feedback as well as store information on the inquirer and help him relate it to workable career options).

4. Direct inquiry systems with both systems monitoring and personal monitoring (such as the ISVD, which was designed to allow the inquirer maximal control over his information-building and career planning-development activities through interacting with the computer in his natural language).

This categorization scheme enables the computer-guidance novice to resolve some of the information-overload problems experienced by a person when he makes his initial contacts with this field. However, he should also realize the generality of some of these four categories. This is especially true of the first category, which should also include innovative computerized guidance alternatives such as local and regional job data services and services that provide test interpretations and synthesis of psychometric data in the area of personal assessment--e.g., Weiss (1968) in his computer-assisted interpretation systems and Prediger (1970) in his Test Validation and Information Feedback System. The first category probably would also cover automated progress monitoring services for youth career development. Smith (1968) provides one example of such an approach. He describes "ALERT," which uses data derived from follow-up studies of four successive classes of graduates to monitor current students' plans, activities, and characteristics. The computer apprises counselors of "alert" conditions for specific students, such as those who select courses considered inappropriate for their posthigh school plans, or those who are not enrolled in classes required of all graduates with similar plans.

Another such computer monitoring example is presented by Flanagan (1970) in one of his descriptions of Project PLAN, a nationwide attempt to provide individualized education. PLAN illustrates the diverse ways in which a computer can be used in an educational context when direct inquiry is not available or desired. In PLAN the computer was designed to: (1) enable guidance programs to integrate with student learning activities in subject matter disciplines and (2) provide a wide variety of indirect interventions that facilitate student career planning, particularly through helping each student and his parents develop his program of studies of specific instructional modules and teaching-learning units related to his long range educational-vocational goals. In Flanagan's words:
The major strategy of the PLAN educational system is related to the guidance and individual planning functions, the program of studies, and the analysis of students' results on module and achievement tests. These aspects are also heavily dependent on the computer, primarily for doing scoring, record keeping, matching, and making predictions and indicating probabilities. The computer thus becomes a very valuable resource for the teacher and student in planning and guiding the student's educational program. (p. 9)

The above four categories used to classify automated guidance approaches to the provision of career facts and information do not appear to be supported by extensive empirical evidence on their costs and impacts on youths, not to mention their cost-effectiveness, cost-efficiency, or cost-benefits. This literature search revealed that leaders such as Super (1970, 1973) devote a brief discussion to cost issues (and nothing beyond that) while many of their colleagues completely ignore, or seem totally unaware of, the issue or at least do not express their concerns on this issue in the available literature. Super (1973), in perhaps the most recent publication on computers in career guidance, concludes that no computer-supported guidance system has a price tag and that:

Perhaps only one generalization concerning costs is possible at this time: multiple sessions at a computer terminal to carry on a personalized dialogue concerning educational and occupational decisions will in due course cost little if any more per pupil than the price of a good book. (p. 304)

Super also reviews instruments and criteria used to evaluate computerized approaches, while pointing out that refinements in both areas are needed before more intensive evaluations can be conducted. Super's document, along with that of Harris (1973), represents the most detailed discussions of the cost and impact of automated guidance systems available to this literature review. Apparently interest in these concerns is increasing.

On the other hand, in one of two recent publications of the National Vocational Guidance Association (NVGA), Harris (1972b) discusses the role of computers in guidance, issues and questions related to computer applications, and solutions to key concerns. Little reference is made to cost issues other than to state that computer systems are costly. No reference is made to the need and procedures for conducting cost analyses, implementing impact evaluations, and studying the relationships among data derived from these two processes. The earlier document (Commission on Computer-Assisted Guidance Systems, 1971) lays out guidelines so that a decision maker exploring computer-based approaches can make informed decisions about the quality of each approach. Even though the Commission states its recommendations tentatively when it states that it is early to develop rigid standards for the use of such systems, it omits entirely any introduction of future issues related to costs, benefits, and the relationships of these two factors. The Commission attends primarily to ethical issues, which is probably representative of the orientation, capabilities, and plans of the Commission members.

Willingham, Ferrin, & Begle (1972) conclude their survey of computer-based guidance systems in a less positive vein than that in the above two NVGA documents.
As one leader in career guidance put it, "We have not really
developed systems with sufficient flexibility. We have tried to
build all sorts of experiences and information on-line that more
appropriately should be off-line." Students are forced into con-
sidering career guidance according to an appointment schedule,
and the expense differential between on-line versus off-line time
is considerable. (p. 4)

Willingham et al. seem to be much less optimistic than Equi & Donovan (1972); for example:

The usual objection to installing an automated system capable of
handling the task outlined is the high cost. Several years ago
this was a valid argument, but recent technological refinements
have made computer systems economically practical for more school
systems....the computer assumes an indispensable role in organ-
izing, updating, storing, and presenting a mass of occupational
information. It accomplishes these tasks in a manner that
promotes increased student involvement in the counseling process,
and thereby fosters student interest in discovering how to relate
aptitudes and interests to vocational opportunities. (p. 274)

Equi and Donovan apparently have access to a different body of literature than
was reviewed by Willingham and his staff or the writers of this report.

Authors such as Harris (1973) and Super (1973) clearly state that there
are many reasons for further investigations. In a recent personal communication
Harris notes that most of the computerized guidance projects must be viewed as
speculative research activities aimed at designing prototypes of future
operational systems. She points out that since cost analyses simply were not
top priority concerns of researchers involved in these projects, it is in-
appropriate to criticize the projects for having insufficient evidence on
costs.

Harris seems to believe that the positive features of computer alternatives
are so numerous that there is no reason to curtail further investigations in
this field. Such features include computers' abilities to: (1) store, retrieve,
and interrelate vast masses of data and to update these data quickly and
efficiently; (2) monitor each student's progress through information gathering,
decision-making, and career planning; (3) relate student self-information to his
career exploration by branching the student to various segments of computer
programs at the user's command; (4) allow the student to generate his own list
of alternatives by identifying those characteristics of occupations or
educational institutions that are important to him; (5) simulate a structured
interview or guidance process and to carry out this process simultaneously
with many users; and (6) be free from the educational system, therefore enabling
computer terminals to be used in libraries, industries, community centers, and
corrections institutions...Super (1973) supplements this list with two addition-
al computer attributes: (1) its "programming power for the multimedia use of

1 Written reactions to this chapter dated 28 April 1973.
information" and (2) "its use of a dynamic conversational mode." (p. 313.)

(3) Nature of Evidence on General Instructional Approaches

Not only is there limited evidence on the costs and impact of computer systems for provision of career facts and information, but there is also a similar lack of such data on computerized approaches to educating (let alone guiding, counseling, or placing) students. For example, many articles on cost-effectiveness and its relationship to computer-based instruction have been written, but most of these are theoretical treatises (e.g., Singh & Morgan, 1971). Few studies have been conducted along the lines of that by Lenn & Maser (1971). They found that the presentation of programmed lessons at a computer terminal was equally as effective as was printed material but that the computer required more student time and was more costly than the workbook format.

Anastasio & Morgan (1972) used the Delphi technique to obtain and analyze judgments of educational practitioners, theoreticians, hardware and software specialists, and evaluators of major impediments to the wider use of computers in instruction. Participants in this study agreed that:

...judgments as to cost-effectiveness are usually ill-formed or unreliable. Consequently, schools do not have sufficient incentive to increase effectiveness, because there is no systematic feedback indicating the school's performance in achieving instructional goals. (p. 42) ...Clearly, since cost-effectiveness is a significant issue in the acceptance of computers in instruction, there will have to be careful analyses of existing costs, at all levels and for different subject matter, in order to establish a baseline for comparison. These problems in comparing instructional methods are exacerbated by the inability of most schools and colleges to measure the cost or effectiveness of conventional instruction. (p. 43)

However, in the area of educational technology in general, there is no consensus on perceptions of these problems or their solutions. At the same time, some of the most cogent statements voiced by persons such as Molnar (1970), who seem to have considerable expertise in this area, complement and extend the Anastasio and Morgan findings.

Molnar's comments can provide a constructive conclusion to this literature summary because they are directed toward multiple aspects of educational technology and therefore seem equally applicable to career guidance technology. He notes that cost-effectiveness studies of educational technology approaches really have not been conducted but that if they were "studies of total systems may well demonstrate ways to significantly increase spending on education, while reducing total costs to the nation," (p. 295) by aiding those people who receive no education or ineffective education and end up on welfare or are institutionalized in prisons or hospitals. Molnar lists the following impediments to the conducting of valid cost-effectiveness, cost-efficiency, and cost-benefit studies. Some of these were briefly introduced earlier in this chapter.
Since education is such an open system, it is difficult to separate confounded independent variables influencing student learning. Therefore "it is difficult to demonstrate that changes in learning are a function of a new educational media system." (p. 295)

There are problems entailed in using typically accepted efficiency criteria; the best system for the lowest costs might have unwarranted negative side effects. In fact, Molnar concludes that: "Effectiveness, rather than efficiency, is probably the more meaningful goal in education." (p. 296)

Molnar agrees that large audiences can decrease the costs of technological approaches but he also points out the problem of getting school districts to cooperate to make such mass uses possible by establishing central facilities and charging districts on a use basis.

Molnar pinpoints a series of measurement problems related to the calculation of cost-effectiveness and cost-efficiency ratios. Those that seem most appropriate for career guidance systems are:

- Many of the relations in such ratios are nonlinear; "the figures are usually based upon total utilization of the system. Most systems have high basic fixed costs and costs-per-student-hour increase rapidly as we move away from total utilization." (p. 296)

- Costs per student-hour can be a deceptive index since it might not be obvious how it was calculated. Hidden costs such as those needed for continued development of software before a technological alternative can be used can be disconcerting to the school administrator.

- "In comparing systems, it is critical that the total-life-cycle costs be taken into account." (p. 296) Such costs must cover initial purchase, continued development, operating, and replacement funds.

Finally, Molnar challenges the types of behavioral objectives available for most effectiveness studies. He sees these as oriented to the status quo. He would like to see systems evaluated in terms of "the consequences of a student not being exposed to certain concepts and skills" rather than on the basis of "our ability to state behavioral objectives and to specify the discrete lists of information necessary to reach them in some minimal time period." (p. 296)

Molnar believes that there is a future for cost-effectiveness. In fact, going back to his original point that cost-effectiveness studies can be conducted and will support the use of technological alternatives, he concludes that:

Sesame Street and the work in CAI have demonstrated that it is possible to engineer materials that will achieve learning effectiveness. Given a "critical mass" necessary to produce quality
materials and regional networks, to deliver the program to large audiences, the cost-effectiveness of media systems can also be demonstrated. (p. 297)

The critical issue highlighted by this literature review is how to initiate and conduct such demonstrations in the field of career guidance, counseling, and placement.

d. Summary

The literature reviewed in this chapter does not substantiate acceptance or rejection of this chapter's hypothesis. No empirical data exist that support or challenge the conclusion that experiments with computerized career information systems have not been cost-effective. Only one study, Ross (1971), is relevant to this statement. Since its design seems basically to oversimplify critical issues of cost-effectiveness analyses and its data seem to be highly subjective, not too much significance is attached to its findings. Not only is there a lack of cost-effectiveness, cost-efficiency, and cost-benefit studies of computerized approaches to providing career facts and information, there is also a lack of evidence on costs and student-related effects of such strategies. Only two systems, the CVIS and the ECES, are supported by both types of data; however, the ECES cost information appears to be speculative only. For two other systems (the ILS and the SIGI), which are currently operational or are undergoing field tests, there is documentation only of estimated cost. None of this limited body of cost and impact information definitely proves whether computerized approaches are worthy of continued experimentation. Although empirical data are lacking, there are consistent theoretical treatises suggesting that automated guidance systems require further research and development as well as more concerted cost-effectiveness, cost-efficiency, and cost-benefit analyses. Not all of the literature agrees with the final part of this statement; some authors believe that such analyses must be postponed until computer alternatives reach much more sophisticated stages of development.

The literature review also indicates that an impressive variety of media, methods, and materials in addition to computer strategies has been developed for provision of career facts and information. However, these approaches also have not been investigated for costs and impact. The result is that media evaluation studies such as that of Mitchell (1972) become definitive because of the lack of competition. The lack of career fact and information approaches suggests that this chapter's hypothesis is inappropriate when it states that "other media, methods, and materials must be developed to provide career information." The urgent need does not seem to be for more development, but rather for systematic organization and evaluation of existing approaches. More and better cost, impact, cost-effectiveness, cost-efficiency, and cost-benefit analyses must be conducted in this important area of career guidance, counseling, and placement for noncollege-bound youths and for youths in general.
e. **Recommendations**

This chapter's literature review highlights the need for action on priority issues such as the ones summarized below. (The recommendations are not listed in order of importance.)

1. Attention should not be directed toward development of "other media, methods, and materials" for providing career facts and information. Attempts are needed to update available approaches in terms of the current characteristics of inquirers and career options. Creativity is not lacking in the wide variety of available strategies; however, empirical data either supporting their use or indicating aspects for improvement are critically needed.

2. Efforts must be directed to providing evidence on at least the following variables for key approaches (these variables are listed in the order in which data probably should be collected): construction of operating systems, impact on inquirers and the institutions serving them, costs, cost-effectiveness analyses, cost-efficiency analyses, and cost-benefit analyses. It appears possible that Tickton & Kohn (1971) are correct when they state that project directors have not collected evidence on some of these variables because "they did not want to know too much about costs or cost-effectiveness. The knowledge might be embarrassing...." (p. 9.) Harris (1973) also seems correct in her conclusion that it "appears that CVIS, SIGI, and ILS are approaching cost feasibility." (p. 14.) Such systems need detailed cost-effectiveness evidence to accompany such cost estimate information.

3. From the early stages of their research and development activities, the developers of automated and nonautomated approaches to provision of career guidance facts and information should give attention to impact and cost factors. These factors relate to high priority decision-making data needs for most persons, including student inquirers, who will make decisions on the utility of an approach. Funding sources should require that these developers outline a plan of action for handling such concerns and monitor its implementation. This recommendation is not expected to be received enthusiastically. Some developers believe that such considerations should not receive attention until their products reach the marketing stage. Others probably will counter by stating that they have considered these factors throughout their research and development activities. However, the literature does not reflect such considerations. The timing of moving these impact and cost considerations out of the discussion phase and into the phase of empirical data collection is the critical issue. It is difficult to conjecture about specific times or instances since these probably will vary greatly from approach to approach. However, a rule of thumb would be that preliminary evidence should be collected when users are exposed to the approach after the first debugging-revision cycle. Such field trials should be scheduled as early as possible, even if it necessitates assessment of a prototype of the fully-developed approach.

In the context of computerized approaches, this recommendation is com-
patible with the conclusion that Herr & Cramer (1972) make follow-
ing their survey of this field. They favor further research and
development on such approaches.

It is clear that computer technology can provide help in
implementing a systems approach to vocational guidance in
the schools. A great deal of development is still necessary
to make computers even more effective. Their development is
currently in the toddler stage, but they are likely to
mature and grow. (p. 298)

The only extension that this recommendation seeks is that the research
and development Herr and Cramer recommend be accompanied by more
systematic and rigorous impact and cost studies. It is apparent that
computer system developers like Harris with CVIS would welcome the
challenge to provide sufficient, appropriate data on cost-effectiveness
and cost-efficiency concerns. Funding support and a possible outside
evaluation team would be needed for such studies. Harris' recent con-
ceptualization of DISCOVER, a system more sophisticated than CVIS,
might have laid the groundwork for such investigations.

This recommendation demands that computerized guidance innovations
should not be the only approaches carrying the burden of cost and im-
 pact proof. Silberman (1966), directing his comments to computer-
assisted instruction, talks about the pressure often imposed on
researchers in the area of educational technology:

We require that the innovation of a computer system be just-
ified not by its instructional value, but by its elimination
or reduction of some other budget category, like teachers' 
 salaries. (p. 8)

In the guidance field, those approaches that are currently in use as
well as those under development should be investigated in the light of
impact and cost factors. At the same time, this recommendation
partially stems from a feeling that some investigators in this field
have ignored practical implementation concerns. Although his dis-
cussion is directed toward counselor acceptance of computerized
approaches, Impelletteri's (1969) comments adequately express this
feeling:

One of the crucial questions that must be answered is, "Is
it the implementation of the experimental prototypes in which
we are primarily interested, or the eventual highly developed
models of the future?"...As we design, try out, tentatively
evaluate, revise, and re-try these tentative systems models
in a highly cooperative school setting, we become absorbed in
the task of developing the "ideal" guidance support system
for this particularly innovative environment. The application
of our efforts beyond this willing and cooperative climate
would appear to be quite limited. (p. 116)
In addition, this recommendation recognizes the problems entailed in conducting cost and impact studies. By reviewing the apparent frustrations of authors such as Molnar (1970), Anastasio & Morgan (1972), and Wilkinson (1972), this chapter summarizes some of the problems related to the specification and collection of cost data. Experimentation with some of these authors' suggested solutions, such as improved accounting methods, is necessary. This need relates to Recommendation 4. As for impact analyses, Recommendation 8 touches on what appears to be the critical impediment to improvements on this evaluation factor. Without the specification of desired career planning and development outcomes that inquirers should be able to achieve by using each computerized approach, impact studies will remain at the highly subjective, general level that characterizes most evaluation studies to date.

4. The weight of the evidence considered in this chapter suggests that cost and impact studies are possible. However, the "how to do it" details must be made available to the investigator and the practitioner. As noted in the recommendations in Chapter 3 on placement and follow-up services for youth, such changes and hopefully improvements cannot occur in a vacuum. There is an urgent need for some highly visible feasibility studies, particularly ones that investigate procedures for conducting cost-effectiveness analyses on automated guidance approaches. Such studies must incorporate procedures for overcoming the impediments that authors such as Molnar (1970) have indicated as working against improved analyses. The desired outcomes of such prototype efforts would be at least to: (a) demonstrate that such analyses can be conducted, (b) illustrate that they can provide critical decision-making information in a timely manner, and (c) document example procedures and instruments needed to implement such studies. If such outcomes occur, specific guidelines and related training procedures could be made available to help investigators and practitioners conduct such studies at different levels of effort and sophistication.

5. As suggested in Recommendation 2, cost-efficiency analyses (as defined in this chapter) need to be conducted on alternative media, methods, and materials for providing career facts and career information. Such studies should study the relative input and output of approaches using the same medium (e.g., computerized direct inquiry systems without systems monitoring) as well as comparable approaches using different media. The key feature of such cost efficiency studies should be that the approaches compared seek to help youths accomplish the same objectives. Discussions by Ross (1971) and Harris (1973) noted earlier in this chapter reinforce the importance of this control. Additional controls should be exercised to the extent possible in the practical situations in which such studies will be conducted so that true experimental or quasi-experimental conditions can be maintained. As a minimum, such conditions should include experimental and control treatments, randomization of subjects to treatments or vice versa, multivariable independent measures, and pre-post assessments of youth career planning and development outcomes.
6. Subsequent efforts must recognize that the distinction between career "facts" and "information" as presented by Tiedeman (1972b) and as accepted in this chapter is not merely a semantic distinction but rather a fundamental premise for the process of career planning and development. Using this distinction, more specific definitions should be made of different approaches to the provision of career facts and stimulation of career information. In the same way, such approaches should be classified further according to career areas (e.g., educational, vocational, personal and social) and to aspects of career planning and development (e.g., personal assessment, career options, problem-solving skills) on which the approaches provide career facts or help youths develop career information. Similar clarifications based on more systematically defined terminology are needed throughout the domain of media, methods, and materials. For example, the classification scheme presented by Miller & Tiedeman (in press) and presented earlier in this chapter would facilitate orientation of novices in this field as well as communication among experts if these categories were more commonly accepted and used. Confusion exists in the field of career guidance because of the ambiguity and lack of standardization of terminology.

7. In the light of Recommendation 6 regarding more precise terminology, the word "system" should be used more carefully. Many approaches reviewed in this chapter represent, but are not presented as, incomplete systems. If multiple areas of "career," multiple aspects of "career planning and development," and multiple components of "a career guidance system" as outlined by Jones et al. (1972) are accepted, approaches that focus only on parts of these elements must be perceived as programs, incomplete systems, or parts of a comprehensive system. It is just as important at times to state what an approach does not attempt in addition to what it does attempt. Harris (1973) seems to sense these limits when she concludes that:

...the present computer systems address themselves to filling the information gap at decision points, not to providing a developmental sequence of career-generating experiences. (p. 8)

8. Consistent attempts must be made not only to evaluate such career guidance, counseling, and placement approaches more stringently, but also to conduct evaluation activities in the context of a comprehensive and systematic planning process. This kind of process covering the program design-implementation-evaluation-feedback and revision cycle is well-documented by Jones et al. (1972) and Campbell (1972). Beyond these references, it is generally missing in the literature on the career guidance field. Harris (1973) alludes to the problem when she states that:

It is also my opinion that a forced, well-planned in-service training program is a necessity before a computer system is installed if the computer-based system is to be used as an integral part of the guidance program. Counselors tend to delegate the career guidance process to the machine totally.
I feel strongly that the questions to be answered are, "What should the school's career guidance program be for all young people?" and then "What parts of that program can best be done by counselor, by computer, and by teacher?"

We need to learn how to best use a computer system in conjunction with individual interviewing, testing, group counseling, guidance, and curriculum. (p. 9)

If a systematic planning approach is used by investigators and practitioners, hopefully more strategies than Harris' three (counselor, computer, and teacher) will be considered. However, the key issue is that the literature indicates that far too often developers of automated guidance approaches use what they think are priority career planning and development needs of their users and also automate the administrative tasks that their institutions need. On this questionable foundation, these developers work with abstract global goals for their approaches, goals that lack the preciseness that results from basing desired outcome statements on empirically derived data related to high priority needs and also facilitates specification of measurable objectives conducive to improving evaluation studies and selection of appropriate media, methods, and materials for helping users achieve these objectives. System designers and system users, as well as their guidance workers and counselors, must have precise knowledge of specific behavior outcomes expected; the variety of media, methods, and materials with high potential for helping inquirers achieve such outcomes; and relevant criteria for determining when these outcomes occur. Such specific knowledge areas are conspicuously absent from most career fact and information approaches currently available.

The systematic and comprehensive planning process recommended here is partially reflected in the following series of questions listed in the National Vocational Guidance Association monograph edited by Harris (1972b). The basic substance of these questions is equally appropriate for any approach for the mediation of career facts and information.

Question 1: What are the guidance needs in the school setting?

Question 2: What problems must be solved and what approaches must be used in order to meet these needs?

Question 3: Can some of these needs be better met by utilization of computer time than by utilization of other media or counselor time?

Question 4: What are the specific goals and measurable objectives of the guidance program?

Question 5: If yes to No. 3, which of these objectives (question No. 4) should be assigned to the computer?
Question 6: What systems design is necessary to insure that the functions performed by counselors and those performed by computer are complementary and supportive to each other?

Question 7: Is there sufficient administrative and financial support to warrant continued planning?

Question 8: If the answer is yes to question No. 7, will the computer system serve only the guidance department, or will it also be used for administrative tasks and/or computer-aided instruction?

Question 9: Should the school design its own computer-based guidance system or make use of one of those already designed and programmed?

Question 10: What will be required in money, personnel, facilities, in-service training, computer equipment, time, and expenditure of energy to implement a computer-based guidance system?

Question 11: Is there sufficient financial and personal commitment from the local school and/or public funding to continue planning?

Question 12: Should the school install computer equipment of its own, hook up to a large regional data-processing center, buy time from a commercial firm, or find a nearby computer with time to spare?

Question 13: What is the plan for implementation, including time schedule, assignment of personnel, orientation to and training of counselors in the computer system as one component of the total guidance systems, ordering of necessary phone and computer equipment, etc.?

Question 14: How will the computer-based system be evaluated in the light of the objectives previously set? To what extent are suitable evaluation instruments available and practical? To what extent will these need to be developed? Is the school's commitment to the project and to the evaluation such that adequate evaluation will be feasible?

Question 15: How will the system be updated and continuously changed in light of evaluation feedback?

Question 16: How can the system be eliminated if it proves ineffective, and what are alternate plans for reaching the same goals? (pp. 14-15)

9. The type of comprehensive and systematic planning process to which Recommendation 8 alludes must give detailed consideration to the
educational context in which the planned guidance, counseling, and placement programs will be implemented. Such consideration has been omitted from approaches reviewed in this chapter, has received bare mention, or has applied only to existing, conventional educational contexts. Some investigators of automated guidance approaches seem to ignore evolving educational strategies such as the individualization of instruction and education. Cooley (1965, 1969) is a major exception. He speculates on the types of guidance services needed for evolving individualized education contexts and seems aware of some frustrating cost possibilities that might accompany computerized guidance in such settings.

In considering computer applications for guidance, the temptation is to identify the major data processing tasks which have faced guidance workers in the past and then attempt to speed things up with the aid of the computer. One difficulty with this direct approach is that computer technology application is a very expensive process, so it is quite important to be rather certain that the processes being made more efficient through automation are worth doing at all. There is also the problem that automation, instead of producing flexibility as one should expect, tends to make procedures more rigid because of the large cost involved in changing computer procedures once they are installed and operating. (p. 61)

With these hesitations in mind, Cooley outlines some of the parameters and services of a "computer-measurement system" for guidance in individualized education. As noted earlier in this chapter, Smith (1968) and Flanagan (1970) describe operational examples of some of Cooley's speculations. Loughary and Tondow (1968) illustrate a similar application in their description of the computer as a developmental monitor that could assist each individual to plan and evaluate his development over a significant portion of his life.

No matter what planning process is used or for what educational context such planning is conducted, the designers of approaches to providing facts and information, especially automated strategies, must explore alternatives for making their approaches more feasible in terms of costs while establishing their approaches on comprehensive and accurate data and information bases. Three possibilities are relevant here. (No examples were found of approaches that had worked for all three possibilities.) First, there is the possibility that regionalized or nationalized rather than localized approaches to provision of facts and information should be established. Limited school budgets suggest that leadership for such consolidation activities must come from state and federal government sources. This recommendation is not a novel one. Venn (1970) mentions one aspect of it when he proposes that a:

...national center for occupational and educational-technical programs should be established with federal funds through the Department of Labor and the Office of Education. Such a
center should have a computer data bank available through a telephone tel-line and printouts to all state and regional centers. Regional centers with data banks containing local and regional information should be established with tie-lines to every high school and two-year post-secondary institution. Guidance and placement personnel would then have specific data for student use during guidance counseling and placement functions in the schools. Such programs are already in use, and a national effort in this direction would make the cost of individual terminals entirely feasible. (p. 247)

Winick (1970) describes a job-bank data approach used in the New York State Employment Service, while Huber & Ullman (1970) suggest the need for a "nationwide computer-aided job-matching network" (which tends to sound more employment service-oriented than individual-career planning-development-oriented). Such approaches come closer to resolving some of the school-community interface problems discussed in Chapter 4 as well as to designing "community career guidance centers" providing all aspects of career planning and development assistance for all inquirers, whether or not they are currently affiliated with an academic institution. Cost and impact studies need to be conducted on current approaches of the types outlined above so that decisions can be made on their transportability or adaptability to other settings where similar needs exist.

A National Vocational Guidance Association publication (1971) on the role of computers in guidance developed specific recommendations in the light of the above issues: the need for lower computer costs and the need for comprehensive, accurate, and readily available data and information for student educational-vocational decision-making. Recommendations related to the issue of costs include:

a. Smaller schools or school systems could collaborate and share the cost of a computer.

b. A computer terminal could be placed in each school building, with a centrally located computer serving many schools or school systems.

c. Computers should be financed and utilized on a state-wide basis, or perhaps on a county-wide or Board of Cooperative Education Services level.

d. Computers could be located in technical or vocational schools, with elementary and secondary schools having individual terminals.

e. Where cooperative programs exist between schools and the employment service, occupational and labor market information could be made available to schools from the computerized job bank system of the public employment service.

f. Schools could explore the possibility of contracting with industry for computer usage on a part-time basis. Some industries or
service organizations with extra computer time available might be willing to provide free computer service in the public interest. (p. 6)

Recommendations on the topic of improved provision of educational-vocational facts and information include:

a. Certain information should be collected and stored on a national level, e.g., the structure of occupations, occupational requirements, and general salary schedules for occupations.

b. A state or region may have educational or occupational characteristics which clearly set it apart from other geographic areas. In such cases it may be desirable to have centers in which state-wide or regional data are collected, stored, and dispensed. Such a data base may also be a viable alternative for areas in which local handling of such processes is not financially feasible.

c. The groups were unanimous in recommending that information appropriate to a given community or metropolitan area be computerized. Communities or local organizations responsible for such data bases would then provide and update information of local relevance, e.g., opportunities for employment in specific occupations in a given locale. (p. 6)

Second, there is the possibility of integrating one or more of the four kinds of computerized guidance approaches listed earlier in this chapter with either computer-assisted or computer-monitored operations or both. It appears that such combinations would facilitate each school district's greater use of available computer facilities. This extension should bring computer costs into a more acceptable financial perspective. Darby, Korotkin, & Romashko (1970) conducted a mail survey of 23,033 public schools and follow-up interviews with 90 selected schools in regard to their computer activities. One of their conclusions seems particularly relevant to this proposed expansion and integration of computer operations. These investigators found that:

...the use of computers, especially in instruction in secondary schools, has grown rapidly. However, the diversity of use is still limited. The most prevalent applications are problem solving and EDP skills training. The major emphasis of computer applications is on teaching students to use a computer as a tool in learning more about the subject area in which the computer is being applied....Local sources provide the majority of funds for instructional computer use. Plans for future use generally call for expansion of present applications. (p. 1)

Third, there is the plan best summarized by Harris (1973) who recommends combining career guidance and administrative uses of school computer facilities.
The addition of a variety of on-line administrative functions, such as scheduling, schedule-changing, and attendance keeping, to a system makes it much more appealing to the administrators who hold the power over appropriation of money. I have come to believe that computer-based guidance systems will not survive if they only perform a guidance function. There must be included in that system enough programs that oil the administrative gears of the school to capture the attention of the administrators. There is a real possibility that these administrative programs will save enough clerical personnel and bring in enough additional money, due to highly accurate reporting of attendance or vocationally-handicapped student enrollment to pay for the guidance part of the system, and therefore make it "free" for student use. (pp. 15-16)

Molnar (1970) agrees by stating that the "development of multi-purpose, multi-function systems can oftentimes bring the cost of media systems into line with our pocket book." (p. 294.) Similar agreement is voiced by Willingham, Ferrin, & Begle (1972) when they state that:

Such systems probably will succeed in local districts to the extent that they provide data to meet administrative responsibilities (scheduling, registration, and so forth) as well as student needs....The expense of systems that simply provide assistance to the student will likely be justified less frequently in relation to competing priorities. (p. 4)

Havens (1967) and Dunlop, Doerr, & Barnett (1969) extend Harris' list of functions that "electronic data processing equipment" can perform for the counselor, therefore making computers more cost appealing. Such functions as test scoring, analyzing test data, generating local norms and expectancy tables summarizing the success of college students and occupational success of noncollege-bound youths, conducting research using stored information on student characteristics, pupil accounting, student scheduling, grade reporting, and early detection of academic problems undoubtedly respond to the priority needs of school administrators, if not to those of career guidance investigators. In fact, the use of computers for indirect inquiries might be one that should be explored more fully before continued attention is given to direct inquiry approaches to computerized guidance. This recommendation seems compatible with the perceptions that Hansen (1970) notes after reviewing the role of computers in education. He arrives at the conclusion that the cost differential between computer-assisted and computer-managed approaches to instruction approximates four orders of magnitude in favor of lower costs for the computer-managed alternative. Therefore, Hansen foresees more development in the latter area until such time as less expensive equipment is available. This logic seems equally appropriate for computer guidance systems for direct and indirect inquiries. In a recent personal communication, Harris\(^1\) adds that further steps, in addition to the

\(^1\)Written reactions to this chapter dated 28 April 1973.
combination of guidance and administrative uses, can be taken to keep down the computer costs. Such strategies include: (a) using the Basic Assembler language instead of higher order languages for programming, (b) employing multiple-choice and limited free response rather than natural language, (c) accepting terminal equipment available on the market instead of prototype terminals created for the system, (d) depending on disk file storage in order to minimize upkeep, (e) conducting developmental activities on-site at an operational center rather than in a research setting, and (f) minimizing the use of audio-visual devices operated by the computer. She illustrates how many of these steps have been taken to make CVIS cost feasible in different school settings. In fact, she adds incidents which suggest that developmental efforts surrounding CVIS have implemented most aspects of this Recommendation 10.

11. As suggested in Recommendation 3, innovative nonautomated and automated approaches to provision of career facts and information should not bear all the burden of evidence on impact and costs. A significant approach in this area, as well as in the whole field of counseling and guidance, is the human counselor. The importance of cost-effectiveness, cost-efficiency, and cost-benefit analyses on counselor functions and services is made vividly clear in the results of such studies as that of Hopfengardner et al. (1968), which identified the costs of guidance services in Ohio secondary schools in the academic year 1965-66. These investigators found that the mean cost of guidance personnel accounted for 97% of total guidance costs. Harris (1973) reports that 99.4% of the guidance department's costs at her school are allocated to personnel. These figures show that technology accounts for only a small proportion of costs and that if technological approaches are to be studied stringently for their costs and impact, guidance personnel should be given at least a similar amount of attention. It is gratifying to note that such efforts are under way in such states as Arizona and California.
4. THE EDUCATION AND TRAINING OF GUIDANCE COUNSELORS HAVE NOT PREPARED THEM TO PERFORM THE PRACTICAL CAREER GUIDANCE AND COUNSELING NEEDED BY THE NONCOLLEGE-BOUND.

Hypothesis 5 is considered in the light of two issues:

1. The background, education, and training necessary for counselors to perform practical career guidance and counseling needed by noncollege-bound students

2. The education and training typically received by guidance counselors

Studies and essays that bear on these issues are reported in this section. Findings from relevant studies, or the opinions of informed individuals, are related to each issue where appropriate. After displaying what is available in the literature on each issue, the results are summarized to aid the reader in reaching his own, independent judgment regarding the veracity of the hypothesis.

a. The Background, Education, and Training Necessary for Counselors to Perform Practical Career Guidance and Counseling Needed by Noncollege-Bound Students

(1) Backgrounds of Counselors

(a) Work Experience

The literature is in general agreement that counselors should become more aware of the world of work and its demands on the individual. Gaining work experience outside the field of education is one means to equip counselors to provide practical career guidance services to secondary school students. Whether this approach should be required of counselor candidates for certification is uncertain. The 6th Report of the National Advisory Council of Vocational Education (1972) recommends that state departments of education require work experience outside of education for all school counselors who work with vocational education students. Bottoms, Gysbers, & Pritchard (1972) report that the 1968 Annual Report of the National Advisory Council stresses a similar theme.

Thorsen (1971) reveals that the trend in the states is away from requiring work experience outside education as a prerequisite to counseling. In 1960, 24 of the 38 states that then certified counselors required nonteaching work experience. In 1971, only 13 of 50 states had such a requirement, and 3 of those states offered alternatives. Three other states require work experience in special cases.
Investigators have collected conflicting data related to the employment histories of counselors working in schools. Campbell (1964) reported that in 1966, 34% of his sample of 308 counselors had held a job for a time equivalent to at least three months of full-time employment in a professional occupation other than teaching or counseling. Some 31% had worked in managerial occupations; 47% in clerical occupations; 40% in the armed services; 16% in agriculture, fishery, or forestry; 39% in service occupations; 28% in skilled labor; 35% in semiskilled labor; and 26% in unskilled labor. The data were not tabulated so that they indicated the percentage of counselors who had not worked outside education.

In 1970, Guerra and Gysbers surveyed the nonschool work experience of Missouri counselors. The mean number of full- or part-time jobs reported was 4.7, and the mean number of years working outside education was 8.3. Experience was distributed across varied occupational areas. Less than 1% of the respondents reported not having had any outside work experience. The data of Phipps (1968) from 207 Kentucky secondary school counselors, however, show different results. Some 56% of the counselors in his sample indicated that their only work experience had been in the field of education.

Requiring potential counselors to have worked elsewhere before they are certified for working in the schools is only one way to achieve the benefits that work experience is thought to provide. Neither set of American Personnel and Guidance Association (APGA) standards for preparing counselors specifically mentions prior work experience as a criterion for selecting trainees (APGA, 1967 & 1972), but some authors have suggested changes in counselor education curriculum to provide exposure to the world of work. As one approach, Hoyt, Evans, Mackin, & Mangum (1972) proposed that federal grants be used to encourage institutions to initiate required work experience programs. They noted that work experience could be gained in summer work-study programs, during sabbaticals, or through exchange programs between the educational and occupational community. McDanels (1966b) seems to rely more on the initiative of the individual counselor in training to explore the employment market and to learn first hand about the structure of jobs, expanding job opportunities, entry level jobs, and long term career development possibilities. As discussed later in this chapter, in-service development of counselors related to knowledge of work is widely recommended. For example, the following statement of APGA's Task Force on Career Development, which was forwarded in an 18 March 1971 letter to John F. Jennings, Counsel, General Subcommittee on Education, U.S. House of Representatives, makes this point:

Special attention must be given to a program of re-educating school counselors in both elementary and secondary school settings to education as preparation for work with appropriate attention directed towards changing counselor attitudes and providing counselors with a variety of kinds of work experience and opportunities to interact with members of business, industry, and labor.

Several programs similar to the one described have already been conducted and are described later.
Counseling and guidance have been linked to education in their development. Initially, most people who wished to become counselors also wished to work in the schools. The knowledge of children and school procedures assumed to be gained as a teacher was thought to be a prerequisite for a counselor candidate. Furthermore, teaching was thought to demonstrate a commitment to helping youths. However, a requirement that a prospective counselor gain teaching experience forces him first to prepare for a profession other than the one at which he will work. In a period of counselor shortages, it adds one more obstacle to recruitment and an additional expense to training. If the teaching experience is inherently different from that of counseling, the teaching experience requirement may screen out potentially good counselors. Also, some authors fear that this requirement will set the school counselor apart from his colleagues who work in other settings (White & Forrest, 1968; Ginzberg, 1971a and 1971b). Ratchick (1969) feels that possession of teaching experience is an imperfect indicator of the ability to handle school situations. He recommends, instead, that more attention be given to selecting qualified individuals for counselor education programs.

Counselor educators in the "Standards for the Preparation of Secondary School Counselors" (APGA, 1967) propose that counselor candidates be selected from various undergraduate specialties and from various occupations. They indicate that those candidates drawn from the teaching profession should have demonstrated superior competence as teachers. Candidates from other fields should demonstrate a knowledge of the school by completing courses and other experiences during training. Teaching experience (or gaining knowledge of the school), however, are not mentioned in the section on selection of candidates in the "Proposed Revised and Combined Standards of the Preparation of Counselors and Other Pupil Personnel Services Specialists" (APGA, 1972a). Instead, selection committees are advised to choose counselor trainees by such established criteria as potential effectiveness in interpersonal relationships, aptitude for counseling, and commitment to a counseling career.

Thorsen (1971) reports that five states do not require State Teacher Certification (STC) for counselor certification and other states have requirements that may be substituted for it. Ten states require a State Teacher Certification but do not require teaching experience. Thirteen states require teaching experience, but allow substitution of other school-related experience for it. Only 21 states actually require from one to three years of teaching experience, and four of these require that this experience be gained with students of the same grade level as those with which the counselor will work. Thorsen found that the trend in the states is toward discontinuing teaching experience as a prerequisite for counselor certification.

This trend may not be reflected in the attitudes of the counselor's employers. White & Forrest (1968) report that Fredrickson & Pippert's 1964 study of the attitudes of superintendents, principals, and guidance directors in Massachusetts toward teaching experience for counselor candidates shows that only 2%, 1%, and 14% of these administrators, respectively, thought it of minor importance. One recommendation for improving the preparation of counselors, made by Ohio school district superintendents, was to increase the amount of teaching experience required of them (Peters & Thompson, 1968).
In a survey of the awareness of guidance services conducted by the New England Educational Assessment Project, investigators found that school principals prefer to combine the counseling and teaching roles and that they feel teaching experience is necessary to sound counseling practice (O'Hara, O'Mahoney, & Tiedeman, 1969).

Ginzberg (1971a) believes that much of the support for retaining the teaching experience requirement for counselors comes from the educational establishment, especially school principals. He found that they have a large amount of control over who will become a school counselor since counselor education programs usually require a candidate to have a letter or recommendation and a tentative employment commitment from their school's principal. Because guidance counselors often become administrators, school principals thus exercise some control over who enters their own profession. However, Hopper, Brown, & Pfister (1970), in a study of the performance ratings of counselors without teaching experience, found no significant differences in counselors' self-ratings on ability to perform basic guidance activities and the ratings given them by their principals. A majority of the principals in this study indicated they would recommend the hiring of counselors with non-teaching backgrounds to their school board. White & Forrest (1968) call for experimentation to demonstrate whether teaching experience is necessary for a school counselor. They propose a training program for counselors without teaching experience designed to ensure that candidates receive the skills and knowledge assumed to be derived from teaching. However, candidates are required to be eligible for a teaching certificate. The authors stress the need to caution possible applicants about the difficulties they will probably face in finding employment as school counselors without teaching experience backgrounds.

The weight of opinion is against requiring teacher certification and teaching experience for counselor certification. No author favored retaining them. Ginzberg speaks for many when he expresses a viewpoint opposed to compulsory educational licensing as a prerequisite to school counseling and recommends "the requirement of teaching experience for the certification of school counselors should be rescinded." (Ginzberg, 1971a, p. 288.)

(2) Education and Training Needed

If counselors are to promote the career planning and development of students, they must become skilled in making each student aware of the widening choices available, thereby increasing his capacity to achieve satisfaction with the choices that he makes. Furthermore, counselors must be able to help students take responsibility for what they choose. Many professionals report on the counselor education implications of these and other statements related to career development theory and research. The views of these professionals are discussed in this section.

McDaniels (1966b) summarizes the outcomes of a national conference of vocational educators, counselors, and counselor educators that had as its goal the definition of counselor activities and competencies in career guidance. Some of his points related to counselor education are listed below:
There is considerable need for the counselor and his educators to expand their knowledge of the career development process. They both need new ideas on how to treat career development information and new techniques for providing field work experiences. The counselor in training should be given more experience in city, state, and regional employment markets and should learn first hand about entry level jobs, the structure of jobs, expanding job opportunities, and long term career development possibilities. In the school, the counselor in training needs to learn how to make career development information a part of the total curriculum of the school.

There is a need for restudy and reinterpretation of needed worker attitudes. The counselor must be able to describe to students such concepts as ethics on the job, work habits, promptness, discipline, flexibility on the job, and adaptability.

The counselor and his educators need to stress leadership both in theory and in practice.

Counselor educators need to widen their scope so that other relevant disciplines and administrative areas can be assimilated into the counselor's new practice in career guidance.

Counselors and their educators need to give renewed consideration to the decision-making process in career development.

(a) Necessary Components

A U.S. Office of Education sponsored workshop held at Teachers College, Columbia University, examined the counselor competencies required for student instruction in occupational information and vocational development in elementary, secondary school, college, and special settings (Meyers, 1967). The participants in the conference included career development theorists, professors who were then teaching courses in occupational information and career psychology, and practicing guidance counselors. These conference participants suggested that vocational development in the secondary school could be facilitated by counselors who participate in a preparation program that includes the following activities (reported by Super in Meyers, 1967, pp. 193-195):

1. Counselor in training self-assessment:
   In order to sharpen the student's awareness of himself as an instrument for action and to try out a variety of analyses in a situation where the objective and phenomenological can be compared, the following tasks are recommended:
   a. student self-assessment of educational and work history
   b. student self-assessment of social class membership and social mobility of family
   c. student self-assessment of aptitudes, interests, and personality
   d. student self-assessment of how well vocational development theories fit him
2. To contrast the phenomenological and objective aspects of vocational development further, the student should also do the above assessments for a person who is quite different from himself. Groups of students should compare their assessments. These assessments should be based upon:

a. objective reports—school and work history, test information, etc.
b. interviews with significant persons in the individual's life
c. an observed or conducted interview with the person himself, reviewing his development

3. Students observe, conduct, and evaluate:

a. the dissemination and mediation of vocational information by institutions, small groups, and individuals
b. interviews of persons at various levels of development involving:
   (1) exploration
   (2) planning
   (3) decision making
   (4) assessment
c. instruction of persons at various levels of development in:
   (1) career exploration
   (2) career planning
   (3) career decision
d. the prediction of vocational development for groups and individuals
e. the whole range of strategies of intervention for career development
   (1) varieties of counseling—individual and group—different viewpoints
   (2) varieties of instruction
   (3) varieties of environmental modification
   (4) varieties of community action programs

4. Student research activity:

a. reading the research literature for selected purposes and reporting back to the student group:
   (1) research on theory development
   (2) descriptive studies
   (3) tests of intervention strategies
b. conducting research in local community and comparing with other locales:
   (1) descriptive study
   (2) test of a theoretical concept
   (3) test of intervention strategy
5. Student training in computer technology:
   a. training in use of computers--learning computer language
   b. involvement in collection of data, presentation of data, and data retrieval
   c. use of computers in research activity described above

6. Student training in educational technology:
   a. display devices--film strip, tape recorders, television, videotape, projectors
   b. library technology--information classification, storage, access, retrieval devices--computers, microfilm, microfiche, etc.
   c. responsive devices--programmed instruction--books, machines, computers
   d. simulation devices--film tapes, games, computers

7. Student training in measurement as applied to vocational development:
   This is usually a separate course, but aspects of prediction, information-giving diagnosis, process-feedback, decision-making, research, selection, and placement uses of measurement devices cannot be excluded from a course in vocational development. There is a problem in proper articulation between two such courses which is usually not solved very well for student understanding and application.

8. Activities of laboratory experience in a course in vocational development:
   a. interviews
      (1) demonstrations by faculty and resource persons--one-way vision, videotapes, films
      (2) edited audio and videotapes to--demonstrate theories, to simulate interviews (eliminate counselor and ask student to be counselor), to demonstrate range of vocational development and varieties of persons
      (3) student interviews--videotaped, audiotaped--reviewed and discussed
   b. group activities
      (1) panel sessions
      (2) group interviews with students, resource persons (parents, counselors, community leaders, etc.)
      (3) role playing
      (4) brainstorming
      (5) research groups
      (6) sensitivity training groups
      (7) planning and problem-solving groups
c. community settings--observation and participation by students
   (1) work settings
   (2) counseling centers
   (3) health centers
   (4) action seminars
   (5) community programs
   (6) youth development centers
   (7) schools

Gysbers (1968), current President of the National Vocational Guidance Association, recommends that relevant vocational experiences can best be made available to students by counselors whose education provides:

1. Understanding of the nature of the vocational development process.
2. Understanding of the socio-psychological correlates of work.
3. Understanding of the part that work plays in the development of responsible adulthood.
4. Understanding of the composition and functioning of the labor force in a system of free enterprise.
5. Knowledge of the variety of available community resources.
6. Knowledge of the gamut of available education, training and occupational opportunities.
7. Knowledge of the collection, analysis, and use of data about in-school and out-of-school populations to assist in curriculum development and improvement.
8. Skills in using available counseling strategies on a differential basis.
10. Skills in working with individuals from diverse cultural backgrounds. (p. 64)

Eight major themes are recommended by these experts for inclusion in a counselor education program that will graduate professionals able to promote student career planning and development in the high school. In summary, counselor candidates should become competent in understanding and using:

1. Career development theory and decision-making processes
2. Guidance and counseling techniques (e.g., role playing, interviewing, and group counseling)
3. Information about general characteristics of the world of work and specific information on education, training, and employment opportunities
4. Information on attitudes needed by workers
5. Processes, results, and implications of student assessment
6. Information on community resources
7. Media (including computers)
8. Research and data collection and analysis for a variety of purposes.

(b) Additional Components

A consensus now exists among counselors and their educators (APGA, 1972) that a supervised practicum is necessary during counselor training. Feingold (1970) supports this position stressing that supervised practice in considerable depth is needed to achieve real competency as a counselor. Liddle & Kroll (1969), in surveying pupil personnel services in Massachusetts, stress the supervised practicum as an effective means of preparing counselors. They also emphasize the need for an interdisciplinary practicum that would provide the student experience in several different settings, varying by more than educational level, and under supervisors trained in several disciplines.

Suggestions are beginning to appear in the literature to the effect that the counselor should be trained in supervision while he is completing his graduate requirements. At present, he may work as a member of a team, and work may require him at times to exercise initiative and control over others. In the future, he is likely to be responsible for supervising several persons. For example, as discussed in a later chapter of this report, a number of agencies and individuals now advocate the introduction of counselor support personnel in practical career guidance and counseling programs for noncollege-bound students. These guidance paraprofessionals would be closely supervised by counselors. Counselors need training in the following areas: in-service training of professional counselors (APGA, 1972); training of support personnel (Jones & Cox, 1970); and day-to-day supervision of trained and regularly employed support personnel (U.S. Department of Labor, 1967b).

Leaders in the field of career guidance increasingly emphasize the need for counselors to develop effective liaison with members of the business and industrial parts of their community. These community members must be requested to: (1) share their expertness with high school youths during exploratory career development experiences, (2) enter into work experience partnerships in the education of students, and (3) hire high school graduates when these individuals seek work. To facilitate liaison with community groups, counselors may draw on their work experience outside education or participate in systematically organized programs that provide exposure to the world of work during the school year and summers (McDaniels, 1966; Gysbers & Pritchard, 1969; Feingold, 1970; APGA, 1971; Hoyt et al., 1972; National Advisory Council on Vocational Education, 1972; Bottoms, Gysbers, & Pritchard, 1972).

National attention is now focused on the necessity for counselors to remain current and credible in relation to the values and concerns of youth. This need was expressed in a 1967 Report on Career Guidance made to the U.S. Department of Labor (1967a) by its Sub-Committee on Career Guidance of the Committee on Specialized Personnel. The position was recently reiterated by Pietrofesa & Vriend (1971). Of particular concern in this updating process is potential bias in the work of counselors with women (Pietrofesa & Schlossberg, 1969) and with members of minority groups (Anderson, 1966; Palomares, 1971; Ratchick, 1969; & Vontress, 1970). Obviously, it would be better to do something about potential biases of counselors-to-be while they are in training. One project that is attempting to modify the biases of currently employed counselors is the Rockefeller Counseling Project.
It was recently funded to give the San Diego Unified School District and the Graduate Department of Counselor Education of San Diego State College an opportunity to undertake a new approach to urban counseling. The project will attempt to develop, through a reconfiguration of the state college counselor education curriculum, counseling personnel (human development ecologists) who can function effectively in the changing urban scene.

(c) Recommended Training Strategies

Several authors in addition to Super (in Meyers, 1967) have made suggestions regarding a counselor education program that would prepare counselors for assisting student career planning and development. Gysbers (1968) suggests the following strategies in connection with the training of counselors for vocational guidance:

1. Short-term work experiences in a variety of occupational settings.
2. Counseling experiences in non-school settings.
3. Field experiences in utilizing community resources.
4. Experience in conducting follow-up studies and community occupational surveys.
5. Visitations to post-high school training facilities.
6. Experience in mobilizing and utilizing various types of data and media (including computer-based counseling systems) to aid counselees in vocational decision making. (p. 64)

Stevic & Hayden (1970) call for training of counselors in disseminating information about noncollegiate post-high school opportunities specifically to non-college-bound students. They recommend the following changes in counselor training programs to ensure more effective assistance for non-college-bound students:

1. In classes discussing educational information, groups of students should be designated to visit business, trade, and technical schools and report back their findings and reactions.
2. In practice counseling experiences, time should be spent on disseminating and using information from the schools discussed above.
3. Positive strategies to deal with student inquiries about less valuable or legitimate schools should be developed to help students seek data and examine alternatives.
4. Training, including practicum experiences, should be provided in helping parents understand all opportunities open to their children.
5. Information on placement agencies available to handicapped (physical, psychological, or social) students should be provided so that referrals may be made when appropriate.
6. Information should be provided about new counseling developments, e.g., placement agencies for specialized training programs, data on programs within local area, apprenticeships, on-the-job training, and specialty schools.

7. Students should be involved in setting up evaluation and accreditation of business, trade, and technical schools.

(d) Counselor Education

In the controversy over whether counselor education should consist of training for vocational guidance technicians or education to facilitate all aspects of student life development, Campbell (1966), summarizing participants' statements during a national seminar, outlined one side of the argument very well. After presenting the goals of guidance in vocational-technical education, he declared they could not be achieved by the "traditional one-man 'Mr. Everything' Counselor." (p. 166.) He suggested a pupil personnel program for schools headed by a coordinator and staffed by a number of specialists. To meet public expectations, full- or part-time specialists in areas such as research, placement, and test administration would be required. The APGA Career Development Task Force (1971) asserts that the education and employment of professional career development counselors is "essential for ensuring the freedom of choice, assistance in occupational and educational decision-making, and the formulation of plans for implementing such decisions that is the birthright of every American." (p. 6.) At least one institution, California State University at Long Beach, has instituted a program to train such personnel (Swan, 1972). The brochure that describes the program expressed the hope that it will soon have certificate status.

It must be mentioned that there is considerable philosophical resistance to this type of activity in the literature. Stripling (1965) states that "There is general agreement on the undesirability of preparing 'academic counselors' and 'vocational counselors'...." (p. 127.) Much of this resistance arises from the desire to treat the individual as a whole person with interrelated needs. Some of it may derive from an earlier (before the advent of career education) fear of isolation in vocational education. Whatever the cause, authors such as Venn (1970) find the dichotomy between academic and vocational education unacceptable; they agree with the opinion expressed by the 1972 Panel of Consultants on Vocational Education:

What is obviously needed is a counselor who meets all the requirements of a professional background in pupil personnel services and who at the same time is a specialist in occupational information, vocational guidance, and counseling.

(Bottoms, Gysbers, & Pritchard, 1972, pp. 542-543)

Both Liddle & Kroll (1969) and Strong (1967) advise against divisions in guidance services or professional identity along academic versus vocational lines.

The issue of whether future career guidance, counseling, and placement services will be provided by one counselor or by a team of cooperating specialists has not yet been resolved. Thus, the issue of the optimum nature of the preparation required of counselors cannot be specified at present.
b. The Education and Training Typically Received by Guidance Counselors

(1) Preservice Preparation

Basic similarities exist throughout the large number of counselor education programs (Horan, 1972). Ginzberg (1971a), in reporting a major investigation of U.S. guidance and counseling practices, classifies the subjects offered in counselor education programs under the headings of personality development, psychometrics, occupational information, and guidance as an institution. He reports that most schools offer some group guidance and supervised field experience. Both Pierson (1967) and Stripling (1965) isolate a core of preparation for all counselors. Pierson defines this core by listing specific courses through which counselor educators impart an understanding of: (1) the nature of counseling clients, (2) the nature of the employing institution, (3) the nature of the community served, and (4) the nature of the helping process. His first category contains courses in human growth and development (including learning and career development), personality, and measurement and evaluation of individual differences. The second category deals with the history, philosophy, and structure of education at different levels. The third contains courses in sociology, anthropology, and economics, and the fourth includes courses in counseling and guidance. Stripling's core, although discussed in less detail, includes the topic of research and evaluation and a trend toward including data processing and programming techniques, in addition to the first, second, and final topics listed by Pierson. Stripling also uncovered a "greater emphasis on an interdisciplinary approach to the understanding of the personal, social, vocational, and educational needs of those from the various subcultures of our society." (p. 127.) This approach probably reflects Pierson's focus on understanding the nature of the community.

The core of preparation identified by Stripling includes a trend toward holding a supervised practicum in individual and small group counseling during the first year of graduate work. During the second year, trainees would probably participate in a supervised internship in a setting similar to the one in which they hope to work. This trend may be slow in materializing. Ginzberg (1971a) reports that, during the 1965-70 period, the one-year Master's training program is estimated to have produced four times as many graduates as the two-year Master's or Doctorate, according to the Interagency Task Force Report.

One indicator of the preparation received by the average high school counselor is the certification requirements he must meet for employment. In a bulletin published by the U.S. Department of Health, Education, and Welfare, Houghton (1967) presents these requirements in detail as they existed in January 1966. In 1971, the Board of Directors of the American Personnel and Guidance Association directed its staff to update that information. The result is a listing of significant changes in certification requirements (Thorsen, 1971). Pietrofesa & Vriend (1971) outline the requirements for each state in general categories (e.g., Master's degree or equivalent, number of years of teaching experience, and minimum number of graduate semester hours in specific areas), but their information is not as recent as that presented in Thorsen.
In his discussion of the requirements for counselor certification, Thorsen indicates that the major requirement throughout the nation remains the completion of graduate course work, although the number of necessary hours varies widely from state to state. Only 28 states require a Master's degree for certification in all cases. South Carolina is unique in that it offers certification to those who complete an undergraduate program in guidance and counseling. Thorsen's tabulation of the specific courses listed in the states' requirements indicated that there was a common core of eight courses believed to be necessary in preparing counselors: "(1) the study and appraisal of the individual; (2) group dynamics; (3) counseling techniques; (4) organization and administration of guidance services; (5) educational and occupational information; (6) principles and practices of guidance; (7) tests and measurements; and (8) supervised practicum." (p. 8.) He also determined that three psychology courses (personality theory, learning, and human growth and development) were required by many states. In addition, courses in educational statistics and educational research were frequently mentioned. Thorsen also found that almost all states (89%) require actual counseling practice under supervision. However, Stevenson & Sandlin (1970) report that most state counselor certification programs and counselor training institutions require only one course in occupations.

(2) In-Service Training

(a) Goals and Format

In-service education to allow practicing school counselors to improve and expand their skills is frequently recommended (e.g., Stevenson & Sandlin, 1970; U.S. Department of Labor, 1967a; APGA, 1971; Gysbers & Pritchard, 1969; and Liddle & Kroll, 1969). Most in-service education programs have as their general purpose updating and upgrading of the competencies of participating counselors. Many focus on career planning and development skills, general vocational guidance skills, or vocational guidance skills for serving special populations such as minority or disadvantaged youths or noncollege-bound youths.

A consensus is not reached in the literature regarding the optimum format for in-service education. Scheduling, duration, and amount and type of structure in the program vary in both recommendations and practice. Liddle & Kroll (1969) recommend university-based, short term, limited focus conferences jointly sponsored by school districts, professional associations, universities, and state departments of education. The U.S. Department of Labor (1967a) suggests that programs for counselors parallel those for teachers and administrators and that the three groups meet occasionally to "promote mutual professional understandings and reinforcements." (p. 20.) The Office of Education published (in 1965) a bulletin on "In-service Education for School Counselors" in which the authors, Twiford & Sievers, summarize concepts advanced by the National Conference for State Guidance Supervisors and Counselor Educators. An individualized approach that takes the counselor from his present state of professional development toward "achieving a fuller realization of counseling potential" (p. 7) is recommended. Individual and group activities (tailored to the specific needs of several counselors) are recommended rather than the common and administratively expedient group approach in which all participants engage in the same activities throughout the program. Individual activities, such as reading, travel, classroom visitation, and participation in professional organizations, are to be part of the
program if they are recognized, encouraged, and expedited by the school and planned by the counselor in cooperation with his guidance supervisor. Responsibility for in-service education was assigned primarily to the school administration and secondarily to the counselor himself. Pietrofesa & Vriend (1971) report statements by the APGA and two of its members (Wrenn and O'Hara) that appear to assign responsibility for professional development solely to the individual counselor. A list of activities to facilitate counselor growth is given including reading, professional organizations, additional education, workshops, travel, coworker study groups, staff self-study, work experience and visitation outside education, writing and research, and personal growth in self-knowledge.

(b) Programs in Career Development

Hansen & Borow (in press) report on an in-service education program for career development conducted since 1967 through cooperative efforts of the Departments of Counseling Psychology and Distributive Education at the University of Minnesota. Summer workshops were conducted to orient school personnel to career development theory and to the world of work in business and industry. Plans for curriculum development and career education programs within local schools were made. The in-service education program was implemented through workshops, courses, exploratory experiences, seminars, and observation.

A training program for vocational counselors held in Colorado in 1967 had three main purposes: (1) developing counselors' skills in assisting youth to choose and prepare for appropriate vocational goals; (2) informing counselors of existing and new vocational training opportunities for youths, especially poor or handicapped youths; and (3) developing counselors' knowledge and understanding of basic vocational philosophy and information so that they may provide more intelligent and effective vocational counseling. The five-week program--attended by 21 school counselors--had three phases. The first was held on a university campus and consisted of formal presentations made by staff and resource personnel. The second was held at a vocational-technical school where most of the participants' time was spent in counseling interviews or visits to business or industry. During the final phase, counselors met with administrators from their home schools for orientation and program planning. At the time of the evaluation of the program, all but three of the schools were able to implement at least part of their program plans and these three expressed the intention to do so (Frick, 1967).

As an outcome of the conference on "Vocational Aspects of Counselor-Education" sponsored by George Washington University in 1965, a summer in-service education workshop focusing on visits to local employers was held (McDaniels, 1966c). Three needs of local counselors were identified and addressed: (1) first-hand knowledge of local business, industry, and government operations; (2) on-the-job information about local entry-level occupations for high school graduates; and (3) refresher training in the use of modern learning resources for the dissemination of information on occupational education. The three-week workshop consisted of two-day visits to large local employers. The mornings were spent in visits to job sites and interviews with employers and recent high school graduate employees. Afternoons were spent studying communications media in space provided by the employers.
The need to inform educators about the world of work and to familiarize business, industry, and labor personnel with educational goals and procedures led to the development of the Missouri Industrial Information Institutes, which were reported on in Gysbers & Ferguson (1970). Institutes were conducted in several Missouri cities as six-week summer extension courses offering university graduate credit. The objectives of on-site visits to local businesses and industries were to assist counselors to learn about: (1) entry level occupations, especially those requiring less than the baccalaureate degree; (2) employers' personnel practices and procedures; and (3) the structure and demands of modern businesses.

Two in-service education programs for counselors have been sponsored, at least indirectly, by business and industry itself. During the summers from 1964 to about 1968, Plans for Progress, a national voluntary equal employment opportunity program of U.S. business with some grant assistance from the Economic Development Administration of the U.S. Department of Commerce, has conducted workshops, usually at local colleges or universities across the country, for the general purpose of improving the vocational counseling available to minority group youths by upgrading counselors' skills and broadening their perspectives. Thousands of counselors from selected cities have participated in such experiences as visits to industry, panel presentations and lectures, large and small group discussions, films, and interviews with students. Generally, the institutes have been found to accomplish their goals (Evaluation: Vocational Guidance Institutes, 1966; Pruitt, 1968). Since 1945, the General Electric Foundation has sponsored summer fellowship programs at universities to help school teachers and counselors increase their competence. Recently these programs have concentrated on providing counselors with skills and information especially related to noncollege careers. Usually six semester hours of credit are granted for graduate studies, supplemented by visits to nearby plants of General Electric and other industries where counselors interview all levels of employees and perform some work tasks. Programs last six weeks and have been held on campuses across the country. Since 1959, more than 1,200 counselors have graduated from the program.

(3) Weaknesses in Counselor Preparation

Preparing counselors in the many services they are expected to provide in the time ordinarily set aside for training may be impossible. Ginzberg (1971a) questions whether the variety of courses included in the usual counselor education program can be covered adequately in the single year that is most often devoted to them. The problem of inadequate time for counselor training is accentuated by the fact that most counselor trainees do not devote full time to professional preparation. Ginzberg (1971a) notes that 80% of school counselors in training study only part of their time. He believes that this situation leads to a technique-oriented approach to guidance rather than to development of the knowledge and skills that are necessary to function in a helping relationship. Didactic instruction, which is more convenient to schedule, is frequently emphasized at the expense of clinical experience.

Furthermore, counselor trainers often do not devote full time to this endeavor. Ginzberg (1971a) reports that the guidance staff of the institutions he reviewed usually had a small number of full-time professors and instructors and was often supplemented by part-time lecturers from local
school systems. Most guidance departments are closely allied with schools of education and also include courses from other departments in their program. Thus, the typical counselor education program is made up of courses taught by three different groups. The courses may reflect differing philosophies and viewpoints. The conflicts inherent in dividing the counselor education commitment may weaken programs.

In 1968, Peters & Thompson sent an open-ended questionnaire to 22 Ohio school district superintendents requesting information on their perceptions of the quality of education received by counselors in their district. Some 50% rated preparation as good, and 45% indicated it was adequate. However, weaknesses were perceived in preparation for research, evaluation, and follow-up activities. Some 64% of the respondents indicated a need for additional preparation in group procedures and knowledge of curriculum. Three superintendents reported that a few counselors complete training without developing skills in "effective communication." These counselors tend to persist in the unproductive or dangerous habit of telling students what to do. Furthermore, nine superintendents felt that counselors need more training in the use of community resources and in working with adults. Finally, the development of vocational counseling skills was noted in seven responses as an area requiring more attention from counselor educators.

In 1967, Herr conducted a national survey of state supervisors of guidance. His instrument consisted of 44 statements of a counselor's role that correspond to those in the American School Counselor Association's (ASCA) policy statements. He asked each respondent to indicate: (1) if the typical school counselor in his state performs the counselor function described, (2) if he considers the function appropriate in terms of the needs of pupils and the needs of the school setting, and (3) if counselor education programs in his state prepare the typical counselor to perform the particular function.

Herr concluded that "state supervisors strongly support the appropriateness of the counselor functions recommended in the ASCA Statement of Policy and that they would expect actual counselor function and counselor preparation to be related to these recommended functions." (p. 243.) However, fewer than 75% of the respondents agreed that the typical secondary school counselor was performing 17 of the 44 functions. They further failed to agree that counselor education programs prepare counselors to perform or cause to be performed 29 of the 44 functions. "In other words, state supervisors do not agree that the typical secondary school counselor is receiving preparation to perform the functions he is not performing, but, in addition, they agree that the counselor is performing 12 additional functions for which they fail to agree that he is receiving counselor education." (Herr, 1968, p. 254.) Discrepancies were especially clear in the areas of group processes of guidance and counseling; research and evaluation; and interpretation of data about students for use in educational modification, curriculum design, and facilitating parental understanding of their children and the school. Herr raised a number of provocative questions related to counselor education and stated:

...the relationship between what is appropriate for the counselor to do, what he actually does, and what he is prepared to do must be meshed in an interlocking continuum. If a high degree of relationship does not exist between these three interrelated dimensions,
concerted and collective improvement and extension of a guidance profession are cast in doubt. The data used in this study strongly suggest that such organic relationships do not now exist. (p. 25)

The work of Peters & Thompson, and Herr tends to support a conclusion that Ginzberg (1971a) drew from different data:

In recent years, the U.S. Office of Education approved less than 20 percent of the 261 counselor training institutions as qualified to receive federal funding for programs in school counselor education. It would appear that the structure of graduate training of guidance personnel in the United States must be inadequate.... (p. 115)

(4) Specific Preparation in Providing Practical Career Guidance Services to Noncollege-Bound Students

In 1966, 85% of the counselors in Campbell's (1968) sample considered that their training was of average or better adequacy. However, a substantial number felt that specialized training experiences should be provided to counselors who work primarily with vocational students, and more than a quarter of them desired better training in occupational information. Phipps (1968) asked a sample of counselors in Kentucky to indicate the strength of their preparation in each of seven areas along a three-point scale. Vocational guidance was one of the two areas that one-third of the counselors considered inadequate. Some 22% considered vocational guidance their weakest area of preparation.

Strowig & Perrone conducted a "Survey of Current Training Approaches, Format Materials, and Curriculum Content in Vocational Aspects of Counselor Education," which was presented as a background paper at the 1965 Conference on Vocational Aspects of Counselor Education (McDaniels, 1966a). Strowig & Perrone contacted representatives of the three groups most intimately involved in preservice and in-service counselor education programs: (1) counselor educators, (2) state guidance supervisors, and (3) city directors of guidance or pupil personnel services. The survey instrument employed included items on regular and special counselor education programs and on the specific counselor training experiences necessary to develop competence in vocational guidance. Results of the survey indicated that all counselor educators offer a course in vocational aspects of guidance and counseling in some form, but that a large percentage offer only an occupational information course. This course is likely to include discussions of vocational development rather than the two topics being offered as separate courses. The major topics presented in vocational development and information courses, according to Strowig & Perrone, include the sources, methods of evaluation, organization, and utilization of occupational information materials and the comparison of different theories of vocational development. The techniques used by professors to teach their courses in the vocational aspects of guidance and counseling are varied and include case studies, occupational surveys, self-study, and written discourses.

In in-service training programs described by respondents, the general emphasis was on presenting information rather than on developing skills. The authors give the impression that much training in vocational aspects of
counseling and guidance is attempted but express the fear that the result of many efforts may be dissipated because of inadequate coordination and integration.

Strowig & Perrone asked their respondents about their use of seven specific counselor training experiences related to the vocational aspects of guidance and counseling. These experiences are: (1) conduct manpower status and needed surveys; (2) interview workers to gain insight into worker characteristics, job satisfactions, and performance requirements; (3) study occupational structures to understand how the worker fits into his work environment; (4) conduct follow-up studies of high school graduates and dropouts; (5) develop information about entry and training requirements for jobs; (6) compare various schemes for classifying occupations; and (7) compare various vocational development theories to understand vocational behavior.

The authors discovered that when responses of the three groups were considered together none of the above experiences was universally provided, and few were developed regularly by even a majority of those reporting. Only training in conducting follow-up surveys of high school graduates and dropouts was done with much consistency. The results of the survey also show that state supervisors make little contribution to the development of counselors' vocational guidance skills and that city directors concentrate on developing skill in three areas: (1) studying occupational structures, (2) conducting follow-up studies, and (3) developing information on job entry and training requirements. Counselor educators bear the brunt of preparing counselors for vocational guidance. Significant numbers of those responding to the survey purported to offer training in all areas except the first. The favorite training areas of counselor educators appeared to be comparing vocational development theories and comparing occupational classification systems. These topics did not arouse the interest or efforts of the state supervisors and city directors, perhaps because these topics were too theoretical and academic.

Rhodes (1970) indicted counselor educators for developing programs that were "conceptually limited, stressing the areas of ... function which would give the counselor greater status in the educational hierarchy." (p. 17.) He declared that they have failed to train leaders for the vocational guidance program and noted a special lack in the areas of training or experiences in community activities that would have promoted involvement with local industries. He considers that the failure to provide practical vocational guidance may stem from university-based counselor education leaders who gained recognition for development of new theories and concepts rather than for the design of practical programs for the public school. Conversely, however, one of the three goals of the in-service training program for vocational counselors held in Denver (Frick, 1967) was to develop the counselor's knowledge and understanding of basic vocational philosophy and information so he can provide more intelligent and effective vocational counseling.

Many authors claim that counselors are deficient in several areas related to career guidance. They are claimed to lack background information about work and knowledge of many occupations that make up the set of alternatives for students' vocational decisions. Frick (1967) identified this as a cause of the counselor's tendency to direct students toward occupations with which he is familiar or that he feels are socially acceptable.
Knowledge of local opportunities for employment or for vocational training was identified as another deficiency in the typical counselor's background. Stevic & Hayden (1970) suggest changes in counselor education curricula to give trainees more information on training opportunities available to non-college-bound students. They recommend that groups of trainees visit business, technical, and trade schools as part of their educational information classes and report back on findings and reactions. Time should be spent during practice counseling experiences on disseminating and using information on such schools. Providing information on local employment opportunities and developing skills in obtaining such information has been the focus of several in-service training programs for counselors (Frick, 1967; McDaniels, 1966c).

Strowig & Perrone (1966) voice concern about the counselor's ability to conduct and use research related to career development. Research skill was not one of the vocationally relevant counselor competencies sought by respondents (i.e., counselor educators, state guidance supervisors, and city directors of guidance) to their survey. This finding led Strowig & Perrone to question the use made of research findings in the schools. "Research methods" were also cited as a specific weakness in counselor education programs that Ohio school superintendents rated as needing remediation (Peters & Thompson, 1968).

A final weakness in the counselor's background was identified in relation to his skills in and use of group guidance procedures. Anderson (1966) commented that these techniques can be used effectively with disadvantaged youths, but that they require especially skilled counselors with greater sensitivity and expertise in group dynamics. Additional counselor preparation in group procedures was cited as a need in 64% of the replies to Peters & Thompson's (1968) questionnaire.

(5) Factors Inhibiting Adequate Counselor Preparation in Career Guidance

The training for all aspects of the counselor's role could be weak, as discussed earlier in this section. Also, the focus of counselor education could be on training for career (i.e., life development) areas other than practical vocational and educational guidance. There is some evidence to support this possibility. Ginzberg (1971a), referring to counselor education programs, states that "faculty and students have a preference for dynamic psychology and there tends to be duplication among courses." (p. 115.) This conclusion could be supported by the results of the survey of directors of counselor education programs conducted by Schneider & Gelso (1972). They set out to determine whether the personal emphasis in counseling psychology was receiving less attention in training than the vocational emphasis. The vocational orientation in counseling concentrates on facilitating choices and is represented in training programs by preparation for vocational counseling, instruction in vocational development theory, and training in the use of aptitude and interest tests during counseling, according to Schneider & Gelso. The personal orientation has as its goal the promotion of personal adjustment and mental health and is taught by such activities as personal counseling, instruction in personality theory, and training in the use of personality tests in counseling. Schneider & Gelso found that preparation for doing social-emotional counseling, comprehension of personality theory, and independent research were generally emphasized more than preparation for educational-vocational counseling and
comprehension of vocational development theory. The counseling student's first practicum is likely to focus only slightly more on personal than vocational counseling but this differential increases in later practica. Schneider & Gelso also found that counselor education programs vary little in the emphasis placed on personal counseling but that the range in amount and strength of training with vocational emphasis is great.

Finally, the focus of counselor education could be on training for providing services to college-bound students. The fact that counselors concentrate on serving these students is usually taken for granted in the literature. However, there is little evidence that the training of counselors focuses on serving college-bound students and neglects preparation for meeting the needs of those who will not pursue four additional years of academic instruction. Some 22% of the respondents in Peters & Thompson's 1968 survey of Ohio school superintendents listed vocational counseling skills as an area needing more attention in counselor education programs. College guidance was generally perceived as an area of strength in counselor preparation by their respondents. However, Campbell's (1968) national survey of vocational guidance in secondary education uncovered the fact that approximately half of the counselors questioned had taken some formal course work in vocational education.

A survey of a random sample of 1,174 school counselors in California, Illinois, New York, and Wisconsin, conducted by H. H. Kaplan of the ACES-ASCA Committee on Preparation for Pre-College Guidance and Counseling (1970), demonstrated that training for meeting the needs of college-bound students may not be perceived as adequate. Kaplan defined precollege counseling as the performance of tasks such as processing transcripts, counseling regarding college choice, interviewing college representatives, engaging in group work with college-bound youths, and speaking with parents about college. He then asked the counselors in his sample questions about: (1) the percentage of time spent in working on precollege counseling, (2) the degree to which their formal course work in counselor education contributed to their knowledge of and skills in precollege counseling and guidance, and (3) their opinion on whether a need exists for counselor education programs to teach specific aspects of precollege guidance and counseling. The results related to counselor education showed that respondents felt that their formal course work had less impact on their skill in precollege counseling than such factors as on-the-job observation and training, short term workshops and institutes, and independent study and reading. In addition, 74% of the respondents in Kaplan's study indicated they felt a need for a course in the various aspects of precollege guidance and counseling. Kaplan summarizes:

The overwhelming majority of the respondents to this survey expressed awareness and concern regarding the limitations of their training. They present a strong mandate for counselor education programs to promote more appropriate training for contact with the college-bound youngster. (p. 11)

Kaplan's summary makes a point that must be considered if the education and training of counselors is to have a significant effect on the improvement of the school guidance services available to students regardless of their
posthigh school plans. A well-planned and balanced set of services is necessary in the schools so that all needs of all students can be met. One means of achieving this balance is to determine student needs carefully, translate them into statements of desired outcomes, specify functions and services which should be provided to help students attain their desired outcomes, identify those services which counselors can best provide, select skills counselors need in order to perform these services, and train counselors and prospective counselors in the necessary competencies.

(6) Efforts to Improve Counselor Education

(a) Accrediting

A start has been made toward improving counselor education through accreditation. This refers to the process:

...whereby an organization or agency recognized a college or university or a program of study within the institution as having met certain pre-determined qualifications or standards. (Dickey, 1968, p. 194)

The Association for Counselor Education and Supervision has prepared standards related to the preparation of secondary school counselors (APGA, 1967) and counselors and other pupil personnel service specialists (APGA, 1972) in the hope that these may encourage the development of some uniform accrediting procedures for counselor education programs and that counselor education in general may improve as a result (Stripling, 1968).

Stevenson & Sandlin (1970) observe that state education agencies are cooperating with counselor education institutions to improve the level of counselor qualifications and that there is considerable evidence that counselor certification and training is being upgraded to improve counselor competence in all areas.

(b) Certification

Thorsen (1971) uncovered several unresolved issues related to counselor certification and made related policy recommendations to APGA. He indicates that states such as West Virginia and Wyoming allow emergency permits to be issued under unusual conditions to individuals who do not meet minimum qualifications. He recommended that APGA voice nonsupport for these emergency certificates. He also found the states were about evenly divided on the issue of specifying requirements for certification at levels beyond that of entry level professional. Twenty-three states offer only one counselor certificate; often it is valid for life. The problem of obsolescence is dealt with in some states by validating counselor certificates for a limited period of time. They are then renewable after completion of some professional development activity. Thorsen recommends that APGA support making counselor certification at all levels temporary and renewal possible only after completion of specified requirements.
Several states are developing, or plan to develop, competency-based certification requirements for school counselors. Washington state plans to institute by 1973 "behaviorally stated performance standards related to client outcomes with no course, credit or degree requirements specified" (Thorsen, 1971, p. 9). Texas currently has one competency-based counselor education program in operation and expects to implement others soon. Certification of counselors based on demonstrated performance competencies is one of the guiding principles for preparation and assignment of counselors adopted by the state board of education in 1971 (Texas Education Agency, 1971). California has developed a list of competencies for the Pupil Personnel Specialist Credential and Utah is circulating for discussion drafts of performance objectives for the certification of school counselors. Other states are also working in this area (Thorsen, 1971).

(c) New Training Models

Counselor educators are working on new modes of training that may result in the preparation of counselors with a higher level of competence. Horan (1972) advocates the use of systems analysis procedures to redirect counselor education. He states that the ability to effect adaptive changes in the behavior of clients is the ultimate criterion of counselor competence. Systems analysis will result in the formulation of training objectives that represent what the counselor will be able to do as a result of his training. Thoresen (1969) explained that a system is a structure that functions as a whole because of the interdependence of its parts. The systems approach in counselor education emphasizes how specific training components can be combined most effectively to produce outcomes represented by desired trainee behavior.

Krumboltz (1967) specifies actions that a counselor education program should prepare trainees to take, including: (1) specifying mutually agreed on behavior change objectives for each client, (2) applying facts about the learning process to the modification of client behavior, (3) judging the success of counseling by the responses of the client, and (4) examining and participating in research to find improved ways to help clients. Whitely (1972) discusses Carkhuff's work in human resource development, which arose from the challenge that professional psychological treatment has no real impact on clients. Carkhuff found that certain interpersonal dimensions of "helpers" (such as empathy, unconditional regard, congruence, accurate empathy, nonpossessive warmth, genuine needs, and client involvement in the therapeutic process) make a difference in the behavior of those being counseled. He developed a skills training program to take advantage of this knowledge. Truax (1970) advocates the use of intentionally structured practice experiences in counselor education to develop interpersonal skills such as those on which Carkhuff concentrates. Truax also relies on research data and special screening procedures to select those counselor candidates most likely to relate to clients and create positive behavioral change.

The trend that seems to tie this work together is its emphasis on the effects that counseling has on those being counseled. If counselor education and counseling itself come to be thought of and evaluated in these terms, many of the concerns raised previously may become obsolete.
c. **Summary**

The literature suggests that counselor education and training should include development of competence in understanding and using career development theory and decision-making processes; guidance and counseling techniques; general information on the different career areas including the world of work and specific information on education, training, employment, and other career opportunities; information on needed career attitudes; processes, results, and implications of student assessment; information on community resources; information on media; and research and data collection. In addition, the literature recommends that counselors participate in a supervised interdisciplinary practicum, be trained in supervision, learn to be effective in a liaison role with business and industry, and remain knowledgeable and concerned about the values and concerns of youth and the communities in which they live.

Counselor education programs are usually made up of courses in tests and measurement, educational and occupational information, guidance theory and techniques, and nature of the guidance clients and settings. They normally include some type of practice counseling experience. Certification requirements, which are a powerful factor in determining the nature of the training received by those counselors who find employment in the schools, usually focus on completing course work and a certain number of hours of experience, rather than on demonstrating competence in facilitating student outcomes. Teacher certification and teaching experience are considered less important for counselors than was formerly the case, and state certification requirements for counselors are moving away from these types of requirements. However, hiring practices may still focus on them as ways of having counselors demonstrate knowledge of the school situation and ability to work with students. Thus, many counselors have teaching backgrounds.

In-service education of some type is often available to counselors so that they can update and upgrade their skills. Some special programs in career guidance have been conducted but the typical counselor usually does not have an opportunity to participate in a systematic, well-planned in-service program that focuses on skill development and continues throughout his career.

Sufficient data are not available in the literature to accept or reject the hypothesis examined in this chapter: "The education and training of guidance counselors have not prepared them to perform the practical career guidance and counseling needed by the noncollege-bound." However, the literature tends to support the following conclusions:

1. Weaknesses in the training of the typical counselor exist related to the shortness and diffuseness of training programs and the lack of preparation in group guidance skills, research and the use of research findings, educational modifications based on data on students, and working with adults.

2. Specific deficiencies in counselor competencies for working with noncollege-bound students entail a lack of background information about work, a lack of information about many educational opportunities or occupations that represent alternatives to these students, and a lack of specific information on opportunities within the local area.
3. Counselors need to become more aware of the world of work and its demands on the individual. Gaining work experience outside of education is recognized as one of several alternative means of increasing such awareness, but opinion is divided on whether work experience should be a requirement for counselor certification. Conflicting data have been collected related to the actual work histories of counselors.

4. Weaknesses in counselor preparation for career guidance of noncollege-bound students could stem from generally inadequate preparation for all aspects of the counselor's role, concentration of preparation efforts on other aspects of the counselor's role such as personal-social counseling, or concentration of preparation efforts on working with college-bound students. A combination of these three factors seems to be a probable explanation for the weaknesses.

5. Efforts to improve counselor education are under way in the areas of accreditation, certification, and development of new training models.

d. Recommendations

On the basis of the information reported in this chapter, the following recommendations are made:

1. The preservice education and training of guidance counselors should be concentrated on developing skills necessary to facilitate desired student outcomes. Research efforts should be initiated to determine these outcomes from needs of students, and to identify the type of persons and specific competencies needed to help students achieve their outcomes. With this kind of background information and additional research, effective training programs may be developed and the issue of the best pattern of staff and technological resources to provide practical career guidance and counseling services to non-college-bound students and all students may be resolved.

2. Requirements across the nation for certification of school guidance counselors should be standardized and revised to reflect skills necessary to facilitate student outcomes. Counselors should be required to demonstrate these competencies at regular intervals to achieve and retain their certificates. Certification requirements that cannot be shown to relate directly to counseling skills should be abolished. (This may be the solution with the teacher credential and teaching experience requirements, although further empirical investigation of this issue is necessary.)

3. Comprehensive, well-planned programs of in-service education that focus on professional skills should be developed, and all school counselors should participate in them. These programs should help each counselor develop the skills he needs to meet revised certification requirements and to grow in competence so that he can advance professionally. These programs should be structured in close coordination with preservice counselor education programs that will
result from concentrating on training in competencies to bring about student outcomes. One aspect of the in-service education program should foster professional growth in knowledge of the world of work by permitting sabbaticals for noneducational work experience and by providing intensive training in local working conditions, requirements, and opportunities.
Chapter 6
PARAPROFESSIONALS AND PRACTICAL CAREER GUIDANCE SERVICES

5. CREDENTIALING REQUIREMENTS INHIBIT EMPLOYMENT OF PERSONNEL WITH WORK EXPERIENCE AND PARAPROFESSIONALS WHO MIGHT BE ABLE TO BRING ABOUT PRACTICAL CAREER INFORMATION AND ACTIVITIES TO THE NONCOLLEGE-BOUND

The literature on this topic is organized according to the following issues:

* Partitioning of practical career guidance functions between counselors and paraprofessionals.
* Credentialing requirements that apply to the employment of paraprofessionals and personnel with work experience for the purpose of performing these functions.
* Other factors that may inhibit employment of paraprofessionals to bring practical career information and activities to noncollege-bound students.

a. Partitioning of Practical Career Guidance Functions Between Counselors and Paraprofessionals

In this section, the term "paraprofessional," usually defined as a sub-professional guidance worker who has had some training specific to his role in the school, also refers to the class of individuals who, because of their work experience outside of education, are employed to perform certain counseling and guidance functions in the school. Recent literature on practical career guidance and counseling (e.g., U.S. Department of Labor, 1967a, 1967b; National Advisory Council on Vocational Education, 1972; Gysbers & Pritchard, 1969; Jones & Cox, 1970; American Personnel and Guidance Association, 1971; Blaker, Schmidt, & Jensen, 1971; Zimpfer, Fredrickson, Salim, & Sanford, 1971; and Mitchel & Saum, 1972) suggests that counselors, their educators, and those currently employed as paraprofessionals favor support of counselors by paraprofessionals. However, the literature does not reveal a similar level of agreement on specific counseling and guidance functions that paraprofessionals should perform. The following pages summarize the differing perspectives that have been published.

(1) Functions of Currently Employed Guidance Paraprofessionals

Many settings in which counseling and guidance paraprofessionals are currently employed are described in the literature. Munro and Carlson, Cavins, & Dinkmeyer provide two instances of the use of paraprofessionals in elementary school guidance practice. Munro (1970) describes an elementary school project in Auburn, Maine, where volunteers help psychologists in the mental health clinic in the reeducation of pupils referred by teachers. After screening by the psychologists
...volunteer activities with the children include: (a) discussing mutual interests; (b) reading stories aloud; (c) playing games; (d) reviewing and completing school assignments; (e) engaging in arts and crafts; and (f) recording stories on tape recorders. (p. 138)

Carlson et al. (1969) describe a project that trained personnel in support of elementary school counselors at Deerfield, Illinois. The paraprofessionals started as testing aides but worked themselves into (1) group observation, (2) data gathering, (3) small group work, (4) classroom group guidance, (5) classroom analysis, and (6) resource work with the counselor. The trainee's additional involvement with pupils was in: (1) structured interviewing for the counselor; (2) provision of reinforcement to pupils under counselor supervision; and (3) working as a tutor with children exhibiting learning disabilities. Thus paraprofessionals performed most of the counseling and guidance functions except direct counseling.

Salim & Vogan (1968) describe a project in which they selected and trained counselor assistants who worked with counselors in Rochester, New York, high schools. The aim of the project was to enable counselor assistants to acquire competencies in: (1) working with groups (e.g., freshmen orientation, provision of vocational information, posthigh school planning); (2) testing, including clerical activities, administration, and explanation but not interpretation; (3) operating and maintaining technical media in the library; and (4) reception/interview (e.g., screening and initial interview of college representatives, parents, teachers, and students).

Schlossburg, Woodruff, & Leonard (1971) describe a Detroit project of several years' standing in which paraprofessionals are employed in several high schools. The project stresses developmental career guidance. Over the years, five functions have evolved for these paraprofessionals: (1) helping students to bridge the gap between graduation (or leaving) and posthigh school education or job opportunities, (2) aiding students in planning their school programs, (3) assisting students in setting both long range and short term career goals, (4) investigating educational and occupational opportunities in the Detroit area, and (5) providing clerical assistance to the counselor.

The Institute for Educational Development (1969) describes different guidance and counseling support functions performed in New York City high schools. Some business and industrial firms in the City have formed partnerships with 30 high schools. In these partnerships, businessmen devote their time free of charge to a variety of activities with schools. These include systems analysis and consultation in management by objectives, as well as instruction and conversation with youth about business activities. Through partnerships, youth have access to business and industry. They are helped to make contacts, prepare themselves for job interviews, and are sponsored in entering some types of work.

Finally, the State of Florida has a 1970 law that provides for education and employment of occupational specialists in Florida schools. According to the "Guidelines for Identification, Training, and Employment of Occupational Specialists" issued by the Florida State Department of Education (undated), the law provides:
1. The occupational specialist shall be under the direct supervision of a certified counselor in the school. He should have a minimum of clerical responsibility. Responsibilities may include, but are not limited to, the following:
   
a. Compiling and disseminating information on employment opportunities at the local, state and national levels

b. Securing and making available prepared materials concerning employment opportunities and requirements to students, parents, teachers, administrators, and out-of-school youth and adults

c. Preparing information on local and state job requirements and opportunities in cooperation with local vocational education instructors and public agencies concerned with employment

d. Assisting in the orientation of persons to job-related preparatory training programs

e. Assisting in securing job placement for persons seeking employment upon completing or leaving a job-related preparatory training program

f. Assisting in follow-up and job adjustment studies of persons completing or leaving job-related preparatory training programs.

2. The occupational specialist, under the supervision of a certified counselor in the school, may be responsible, as an individual or as a member of a counseling team, for specialized assignments. These may include, but are not limited to, the following:

a. Identification of potential or actual school dropouts

b. Counseling with potential or actual school dropouts and their parents or families

c. Counseling students, teachers, and school administrators concerning available job opportunities and requirements

d. Assisting with the planning and implementation of the vocational testing program, including non-verbal testing activities designed to evaluate vocational interests and capabilities of students by means of work simulations and work samples

e. Assisting in evaluation of the career guidance services provided by the district school board. (Adapted from Florida Guidelines, undated, p. 2)
(2) **Recommended Paraprofessional Functions**

At a New York state colloquium on issues in career education (Concerns ..., 1972), the following statement regarding roles to be performed in conducting career education was included in the conference report:

...these roles utilize...[1] fully-prepared generalist counselors...[2] paraprofessionals who can serve as facilitators, change agents, recruiters and job developers, peer counselors and [3] people outside the school staff itself who can play an important role in occupational guidance, all of whom need appropriate training to be effective as team members....

Campbell (1966) includes in a report on the conference a summary statement on the need for, and related functions of, a counseling and guidance paraprofessional:

...schools will have to provide much larger staffs than the traditional one-man "Mr. Everything" Counselor. In reality what is needed is a total pupil personnel program headed by an experienced, well trained Coordinator and staffed by a number of specialists. For example, if it is expected as many have advocated, that guidance programs should provide more extensive occupational information, data on labor economics, and liaison with the department of labor and the industrial community, this service alone would require a full time specialist and represent one member of the total team. The pupil personnel team would also need full or part-time specialists in test administration, placement, research, etc. to meet the public expectancies. It is unrealistic to expect a single guidance counselor functioning in a 500 to 1 student-counselor ratio school system to provide the multiple service demanded by the public. In effect, guidance administrators will have to specify the staff requirements needed to fulfill the expected services. Even if the school systems and governmental agencies are willing to provide the necessary money for the total pupil personnel program, this will not solve the problem since there is a shortage of trained personnel.... Some states have attempted to solve the guidance personnel shortage by employing counselor aides to perform some of the more routine tasks of the guidance program. Others have experimented in similar ways with guidance assistants. Many participants have recommended sub-professional guidance personnel with bachelor degrees or less who specialize in different aspects of the guidance program, e.g., occupational information, test administration, community relations, etc., and who work under the supervision of the pupil personnel coordinator. (p. 166)

California's Master Plan for Pupil Services (Mitchell & Saum, 1972) puts the case for partitioning what the counselor ordinarily is expected to do as follows:

The paraprofessional contributes to the educational program for pupils by relieving the professional staff of routine tasks so
they are able to maximize their professional skills. The paraprofessionals may also contribute by interpreting the home and community to the school staff when the socio-economic and cultural status of parents differ from those of the professionals. They may work directly with the pupils and their parents, or on routine tasks. This work, however, will always be done under the supervision of a professional pupil services staff member. The introduction of paraprofessionals into a pupil services team brings about changes in the roles of other team members. Roles of both professional and paraprofessional need to be structured so they complement each other. (p. 139)

Herr & Cramer (1972) summarize three models of paraprofessional work in career guidance activity. The four areas of guidance technician functions that Hoyt considers supportive of career guidance are:

1. Outreach specialist--concerned primarily with contacting and recruiting disadvantaged students for vocational education.

2. Data gatherer--concerned with conducting local occupational surveys and in recording and updating information regarding full- and part-time job opportunities, labor unions, apprenticeship councils, and vocational training opportunities outside the public school setting.

3. Test operator--concerned with the development and operation of a wide variety of simulation activities that would produce a reliable sample of the student's ability to actually perform the kinds of tasks taught in a particular vocational education program.

4. Follow-up man--concerned with developing procedures and conducting studies of the outcomes of different phases of education and guidance. (p. 329)

The second model (attributed to Goldman) describes another form of paraprofessional in career guidance and counseling. This person:

1. Assists pupils to locate reference materials about occupations and about schools and colleges.

2. Places on cumulative and other records significant information such as test scores, teacher ratings, and anecdotal or health reports.

3. Conducts individual and group orientation conferences with incoming pupils, informs pupils of school curricular offerings, extracurricular opportunities, study methods, and other aspects of adjustment and development in the school.

4. Assists pupils with the more routine aspects of scheduling.
5. Carries out routine statistical work in compiling data pertaining to pupils such as test-score distributions, occupational and educational preferences, and socio-economic status. He may prepare local norms and experience tables.

6. Carries out prescribed activities in connection with studies such as surveys of job opportunities; surveys of referral possibilities in the community; follow-up studies of the school's graduates and dropouts.

7. Maintains an up-to-date collection of information materials concerning educational and occupational opportunities.

8. Administers paper-and-pencil tests in groups and individually as directed by the school counselor. (p. 329)

Finally, there are the functions of the paraprofessional prescribed by a 1967 statement of the American Personnel and Guidance Association, which Herr & Cramer (1972) report as follows:

a. Secure information from an interviewee by means of a semi-structured interview schedule. The information elicited would tend to be factual and limited in nature.

b. Give information prepared in advance and approved by the counselor for its appropriateness for the interviewee. Such information would usually be factual rather than interpretive.

c. Engage the counselee in informal, casual, colloquial discussion as a means of putting him at ease in establishing an openness to counseling. Such a dyadic activity may be especially important when performed by an interviewer who is making initial contact with potential counselees who are hostile toward or apprehensive of counseling.

d. In structured groups with a largely preplanned program, guide discussions as a discussion leader.

e. Administer, score, and profile routine standardized tests and other appraisal instruments (non-clinical type).

f. Obtain and maintain routine information on the scope and character of the world of work with current reference to employment trends, in accordance with instructions established by the counselor.

g. Prepare educational, occupational, and personal-social information for visual-auditory verbal and graphic presentation or transmittal to others for use, in accordance with instructions established by the counselor.

h. Initiate general contacts with specific referral agencies.
Through appropriate channels, establish and maintain working relationships with organized placement agencies in the community.

Maintain appropriate personnel and information records for the counselor. (p. 328)

Zimpfer et al. (1971) discusses the same statement of the American Personnel and Guidance Association in greater detail:

The APGA role statement on support personnel...lists several clusters of related activities; these clusters are termed functions. The statement suggests both direct and indirect helping relationships for support personnel. "Direct" refers to actual contact with counselees; however, it is emphasized that person-to-person contact is not equivalent to counseling as conducted by the counselor. "Indirect" means providing services which do not involve the support person in face-to-face contact with the counselee, but which allow him to do work on a client's behalf or in furthering the whole guidance service as suggested by the counselor. APGA's 32 suggested activities for support personnel are grouped as follows:

Direct helping relationships:
1. Individual interviewing function
2. Small-group interviewing or discussion function

Indirect helping relationships:
1. Information gathering and processing function
2. Referral function
3. Placement function
4. Program planning and management function

The APGA role statement's outline...provides guidelines for job descriptions with the explicit provision that support personnel plan and perform their duties under the counselor's supervision. (p. 7)

Surveys of Paraprofessional Functions

Jones & Cox (1970) report the attitudes of a sample of 200 heads of counselor education programs about the functions that are appropriate for support personnel in assisting secondary school counselors. The results of the survey are reported in Table 1.

The results of Jones & Cox's study indicate that when an activity is routine, the counselor educator is willing to have it done by persons who are trained in that procedure and not in many of the additional procedures that the counselor must master. However, as activities approach those in which judgment must be constantly exercised, counselor educators believe that such activities should be reserved for the counselor whose professional training has prepared him to exercise judgment without continued close supervision.
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<thead>
<tr>
<th>Function</th>
<th>Appropriateness</th>
<th>Responsibility for Training</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Yes (percent)</td>
<td>No (percent)</td>
</tr>
<tr>
<td>1. Assisting in research</td>
<td>96.5%</td>
<td>3.5%</td>
</tr>
<tr>
<td>2. Information-gathering and processing</td>
<td>95.5</td>
<td>4.5</td>
</tr>
<tr>
<td>3. Group test administration and scoring</td>
<td>94.7</td>
<td>5.3</td>
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<tr>
<td>4. Secretarial tasks</td>
<td>93.4</td>
<td>6.6</td>
</tr>
<tr>
<td>5. Routine follow-up of counselees</td>
<td>91.6</td>
<td>8.4</td>
</tr>
<tr>
<td>6. Scheduling</td>
<td>87.0</td>
<td>13.0</td>
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<td>7. Information resource for students and parents</td>
<td>77.3</td>
<td>22.7</td>
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<td>8. Fact-finding interviewing</td>
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<td>9. Job placement</td>
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<td>10. Orientation</td>
<td>74.7</td>
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<tr>
<td>11. Providing teachers with information regarding pupils</td>
<td>48.1</td>
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<td>12. Referral to outside agencies</td>
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<td>13. Parent conferences</td>
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<td>14. Test interpretation</td>
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<td>15. Group counseling</td>
<td>27.4</td>
<td>72.6</td>
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<td>16. Administering individual intelligence tests</td>
<td>25.8</td>
<td>74.2</td>
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<tr>
<td>17. Individual counseling</td>
<td>25.4</td>
<td>74.6</td>
</tr>
</tbody>
</table>

(Adapted from Jones & Cox, 1970, p. 53)
Blaker, Schmidt, & Jensen (1971) surveyed all community colleges in California and a 25% random sample of California high schools as well. Respondents were requested to indicate how they use or would use counselor aides (CAs). The highest ranked response from both groups of schools was the response of clerical assistance. Another high-ranked activity of both groups was responsibility for maintaining career and college information libraries. Community colleges were more active in using CAs for outreach (activities intended to establish and maintain personal contacts with dropouts to get them back in school). High schools infrequently listed outreach and tutoring. The authors felt it was reasonable and efficient for high schools to use minority group CAs in contacting minority students, though. Gathering and organizing test materials and test proctoring are frequently activities assigned to CAs, particularly in high schools. However, interpreting test results and helping counselees use the results are usually reserved for counselors. Other CA functions that were mentioned occasionally were: gathering general student data, individual and group orientation for new students, dissemination of routine information, helping students fill out forms correctly, handling counselor appointment books, answering the telephone, and organizing and coordinating time and facilities for maximum use.

Some information is available on the perceptions of their functions by guidance support personnel. Salim (1971) concludes from his survey of those who actually work as guidance paraprofessionals:

...Approximately 80 fairly discrete job activities were indicated. These ranged from procuring and preparing supplies and materials for counselor use (44 reported this as their duty), to a number of activities listed by only single respondents. All of the activities in the APGA role list were performed by one or more support personnel. (p. 24)

Using data supplied by support personnel themselves, these workers are performing many activities previously considered to be in the counselor's domain. (p. 25)

Zimpfer (1971) surveyed a 4% random sample of the members of the American School Counselor Association in 1968. His data are reported in Table 2. The data presented in Table 2 indicate the considerable variability that exists in counselor opinion about the appropriateness of paraprofessionals participating in various counseling functions. However, on all functions there is more agreement than disagreement that paraprofessionals can participate. It also seems clear that there is more agreement about paraprofessional participation in activities in the indirect help, placement and follow-up, and program management clusters than there is in the referral, group discussion, and individual interview clusters. It appears that counselors welcome assistance but hesitate to accept it in tasks that they consider only they can do.

(4) An Integrative Position on Paraprofessional Functions

The Committee on Support Personnel for Guidance in the Schools of the Association for Counselor Education and Supervision (ACES, a division of the American Personnel and Guidance Association) suggests an integrative position on support personnel (Zimpfer et al., 1971). This position is based on work
Table 2
COUNSELOR RESPONSES TO ITEMS FROM THE APGA STATEMENT ON TECHNICAL AND NONTECHNICAL ROLES FOR SUPPORT PERSONNEL

<table>
<thead>
<tr>
<th>Clusters and Items</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N ( % )</td>
<td>N ( % )</td>
<td>N ( % )</td>
<td>N ( % )</td>
<td></td>
</tr>
<tr>
<td>Interview client</td>
<td>36 ( 8.3)</td>
<td>95 (21.9)</td>
<td>251 (58.0)</td>
<td>51 (11.8)</td>
<td>2.73</td>
</tr>
<tr>
<td>Give prepared information</td>
<td>23 ( 5.3)</td>
<td>94 (21.6)</td>
<td>272 (62.5)</td>
<td>46 (10.6)</td>
<td>2.78</td>
</tr>
<tr>
<td>Explain counseling</td>
<td>24 ( 5.6)</td>
<td>100 (23.1)</td>
<td>253 (58.6)</td>
<td>55 (12.7)</td>
<td>2.78</td>
</tr>
<tr>
<td>Put client at case</td>
<td>56 (12.9)</td>
<td>133 (30.6)</td>
<td>197 (45.3)</td>
<td>49 (11.3)</td>
<td>2.55</td>
</tr>
<tr>
<td>Cluster: individual interview</td>
<td>35 ( 8.0)</td>
<td>106 (24.3)</td>
<td>243 (56.1)</td>
<td>50 (11.6)</td>
<td>2.71</td>
</tr>
<tr>
<td>Discussion leader</td>
<td>45 (10.4)</td>
<td>185 (42.7)</td>
<td>170 (39.3)</td>
<td>33 ( 7.6)</td>
<td>2.44</td>
</tr>
<tr>
<td>Information resource</td>
<td>11 ( 2.5)</td>
<td>51 (11.7)</td>
<td>282 (64.8)</td>
<td>91 (20.9)</td>
<td>3.04</td>
</tr>
<tr>
<td>Recorder in group</td>
<td>12 ( 2.8)</td>
<td>65 (15.0)</td>
<td>267 (61.7)</td>
<td>89 (20.6)</td>
<td>3.09</td>
</tr>
<tr>
<td>Observer in group</td>
<td>33 ( 7.7)</td>
<td>149 (34.7)</td>
<td>208 (48.4)</td>
<td>40 ( 9.3)</td>
<td>2.59</td>
</tr>
<tr>
<td>Put group at case</td>
<td>31 ( 7.2)</td>
<td>153 (35.6)</td>
<td>211 (49.1)</td>
<td>35 ( 8.1)</td>
<td>2.58</td>
</tr>
<tr>
<td>Information and support to former counsees</td>
<td>15 ( 3.5)</td>
<td>122 (28.7)</td>
<td>251 (59.1)</td>
<td>37 ( 8.7)</td>
<td>2.73</td>
</tr>
<tr>
<td>Outreach activities</td>
<td>9 ( 2.7)</td>
<td>79 (18.0)</td>
<td>217 (46.4)</td>
<td>32 ( 9.5)</td>
<td>2.81</td>
</tr>
<tr>
<td>Cluster: group discussion</td>
<td>22 ( 5.3)</td>
<td>115 (27.4)</td>
<td>229 (55.2)</td>
<td>51 (12.1)</td>
<td>2.74</td>
</tr>
<tr>
<td>Testing</td>
<td>11 ( 2.5)</td>
<td>45 (10.4)</td>
<td>165 (38.0)</td>
<td>213 (49.1)</td>
<td>3.34</td>
</tr>
<tr>
<td>Get and maintain work information</td>
<td>2 ( 0.5)</td>
<td>13 ( 3.0)</td>
<td>194 (44.6)</td>
<td>226 (52.0)</td>
<td>3.48</td>
</tr>
<tr>
<td>Contact others for records</td>
<td>3 ( 0.7)</td>
<td>22 ( 5.1)</td>
<td>191 (43.9)</td>
<td>219 (50.3)</td>
<td>3.44</td>
</tr>
<tr>
<td>Find information resources</td>
<td>15 ( 3.5)</td>
<td>85 (19.6)</td>
<td>223 (51.5)</td>
<td>110 (25.4)</td>
<td>2.99</td>
</tr>
<tr>
<td>Prepare information for use</td>
<td>7 ( 1.6)</td>
<td>71 (16.6)</td>
<td>256 (59.7)</td>
<td>95 (22.1)</td>
<td>3.02</td>
</tr>
<tr>
<td>Find referral spots</td>
<td>8 ( 1.9)</td>
<td>55 (12.8)</td>
<td>273 (63.6)</td>
<td>93 (21.7)</td>
<td>3.05</td>
</tr>
<tr>
<td>Information about former counsees</td>
<td>10 ( 2.4)</td>
<td>88 (20.7)</td>
<td>242 (56.9)</td>
<td>85 (20.0)</td>
<td>2.95</td>
</tr>
<tr>
<td>Audiovisual operator</td>
<td>3 ( 0.7)</td>
<td>8 ( 1.9)</td>
<td>195 (45.2)</td>
<td>225 (52.2)</td>
<td>3.49</td>
</tr>
<tr>
<td>Cluster: indirect help</td>
<td>7 ( 1.7)</td>
<td>48 (11.2)</td>
<td>217 (50.4)</td>
<td>158 (36.6)</td>
<td>3.22</td>
</tr>
<tr>
<td>Seek referral sources and contact</td>
<td>28 ( 6.5)</td>
<td>127 (29.7)</td>
<td>204 (47.7)</td>
<td>69 (16.1)</td>
<td>2.73</td>
</tr>
<tr>
<td>Plan specific referral</td>
<td>41 ( 9.6)</td>
<td>211 (48.2)</td>
<td>145 (33.8)</td>
<td>32 ( 7.5)</td>
<td>2.39</td>
</tr>
<tr>
<td>Aid individuals in referral process</td>
<td>25 ( 5.8)</td>
<td>132 (30.8)</td>
<td>229 (53.4)</td>
<td>43 (10.0)</td>
<td>2.68</td>
</tr>
<tr>
<td>Cluster: referral</td>
<td>31 ( 7.3)</td>
<td>157 (36.5)</td>
<td>193 (44.9)</td>
<td>48 (11.2)</td>
<td>2.60</td>
</tr>
<tr>
<td>Develop placement possibilities</td>
<td>11 ( 2.6)</td>
<td>87 (20.2)</td>
<td>250 (58.1)</td>
<td>82 (19.1)</td>
<td>2.94</td>
</tr>
<tr>
<td>Help individuals in unusual cases</td>
<td>9 ( 2.1)</td>
<td>97 (22.7)</td>
<td>268 (62.8)</td>
<td>53 (12.4)</td>
<td>2.85</td>
</tr>
<tr>
<td>Survey placement trend</td>
<td>3 ( 0.7)</td>
<td>19 ( 4.4)</td>
<td>258 (60.0)</td>
<td>150 (34.9)</td>
<td>3.29</td>
</tr>
<tr>
<td>Find new placement sources</td>
<td>3 ( 0.7)</td>
<td>30 ( 7.0)</td>
<td>210 (55.8)</td>
<td>157 (36.5)</td>
<td>3.28</td>
</tr>
<tr>
<td>Get follow-up data</td>
<td>2 ( 0.5)</td>
<td>14 ( 3.2)</td>
<td>237 (55.0)</td>
<td>178 (41.3)</td>
<td>3.37</td>
</tr>
<tr>
<td>Cluster: placement and follow-up</td>
<td>6 ( 1.3)</td>
<td>49 (11.5)</td>
<td>251 (58.3)</td>
<td>124 (28.8)</td>
<td>3.15</td>
</tr>
<tr>
<td>Collect, analyze data</td>
<td>1 ( 0.2)</td>
<td>29 ( 6.7)</td>
<td>244 (56.6)</td>
<td>157 (36.4)</td>
<td>3.29</td>
</tr>
<tr>
<td>Prepare supplies</td>
<td>4 ( 0.9)</td>
<td>8 ( 1.9)</td>
<td>208 (48.1)</td>
<td>212 (49.1)</td>
<td>3.45</td>
</tr>
<tr>
<td>Make reports</td>
<td>16 ( 3.6)</td>
<td>81 (19.0)</td>
<td>229 (53.8)</td>
<td>100 (23.5)</td>
<td>2.97</td>
</tr>
<tr>
<td>Keep records</td>
<td>9 ( 2.1)</td>
<td>48 (11.2)</td>
<td>230 (53.7)</td>
<td>141 (32.9)</td>
<td>3.18</td>
</tr>
<tr>
<td>Supervise personnel</td>
<td>12 ( 2.8)</td>
<td>80 (18.5)</td>
<td>213 (49.3)</td>
<td>127 (29.4)</td>
<td>3.05</td>
</tr>
<tr>
<td>Cluster: program management</td>
<td>8 ( 2.0)</td>
<td>49 (11.5)</td>
<td>225 (52.3)</td>
<td>147 (34.3)</td>
<td>3.19</td>
</tr>
<tr>
<td>Define support role</td>
<td>3 ( 0.7)</td>
<td>40 ( 9.3)</td>
<td>277 (64.1)</td>
<td>112 (25.9)</td>
<td>3.15</td>
</tr>
<tr>
<td>Evaluate support work</td>
<td>8 ( 1.9)</td>
<td>45 (10.4)</td>
<td>275 (63.8)</td>
<td>103 (23.9)</td>
<td>3.10</td>
</tr>
</tbody>
</table>

(Zimpfer et al., 1971, p. 30)
by R. H. Fredrickson. He developed a statement of specific school guidance support tasks from the American School Counselor Association's statement on the counselor's role and tested it in a local school project. Fredrickson started with the following 10 areas of function from the ACES role statement:

1. Planning and development of the guidance program
2. Counseling
3. Pupil appraisal
4. Educational and occupational planning
5. Referrals
6. Placement
7. Parent help
8. Staff consulting
9. Public relations
10. Local research (p. 39)

An eleventh category, "General," was added later. Using these 11 categories he listed 171 specific tasks of guidance support personnel and arranged the tasks into three levels from nontechnical (including clerical) to technical. Tasks at Level I require a single tangible activity, those at Level II are more complex and usually require two activities, and those at Level III are even more integrative and require several skills.

In the position statement of the Committee, support personnel are seen as extensions of the counseling and guidance program. Tasks at all three levels are to be performed under the supervision of the counselor, but he and the support person are to work as a team. Figure 1 represents the division of functions between counselors and support personnel that was recommended.

(5) Lack of Consensus on Paraprofessional Functions

The cataloguing of paraprofessional functions (both those recommended and those being performed) highlights the evident lack of consensus on how practical career guidance and counseling functions should be partitioned between counselors and paraprofessionals. Fredrickson's work outlines a major attempt to arrive at a position acceptable to the professional organizations of counselors, but there is little evidence that it represents more than the position of a committee.

The lack of agreement on the division of counseling and guidance functions between professional counselors and paraprofessional personnel may stem from the fact that the exact nature of the paraprofessional role has not been agreed on. Although most authors define the paraprofessional as one who functions under the direct supervision of the professional counselor, the question of the appropriate relationship between the two roles is still open. Should the paraprofessional function as an assistant to the counselor and perform only low level activities that contribute to the counselor's accomplishment of his tasks? Should the paraprofessional perform a set of functions that the counselor does not usually perform (and is not ordinarily trained to perform)? In this case, the paraprofessional might specialize in outreach and follow-up functions. Should the paraprofessional perform some of the functions that the counselor has been doing, such as those that the paraprofessional's experience especially qualifies him to do? In this case, the paraprofessional may
Figure 1

RELATIVE MAGNITUDE OF SUPPORT PERSONNEL AND COUNSELOR FUNCTIONS

(Zimper et al., 1971, p. 41)
communicate special information on opportunities in the world of work to students whose background is different from that of the typical counselor. Until this issue of the specific role of the paraprofessional is resolved, consensus cannot be reached on the division of counseling and guidance functions.

b. Credentialing Requirements That Apply to the Employment of Paraprofessionals and Personnel with Work Experience for the Purpose of Performing These Functions

Little information exists on credentialing requirements that apply to employment of paraprofessionals and people with work experience for the purpose of performing certain practical career guidance functions for non-college-bound high school students. Zimpfer (1972) states:

Another problem, still to be faced, is the legal and professional status of support personnel in guidance and student services. No state, as yet, has adopted support personnel certification procedures. The rapid increase in use of aides and the varied duties they perform has made it almost impossible to pass legislation regarding support personnel....At present the most applicable legislation appears to be teacher aide law.... (p. 60)

More information is available on state legislation that defines the legal activities of teaching aides. In 1970, Borstad and Dewar sent a letter of inquiry to the state superintendents of public instruction in all 50 states seeking statements on the official position of the states regarding the employment of teaching paraprofessionals in the schools. Twenty of the 50 states indicated that they had no official position regarding teacher aides, but a large number of these stated that the matter was under consideration or that bills were pending in the state legislature. Only Delaware, Iowa, and Maine responded indicating that these states have provisions for certifying or authorizing individuals as paraprofessional teachers. Zimpfer et al. (1971) report that as of 1969 ten states had some legislation dealing with teacher aides. These laws have various provisions:

They grant the aide the right to practice certain limited teacher functions under minimal supervision, the teacher being available but not necessarily in actual attendance; or they protect the teacher by disallowing an increase in teaching load upon hiring of support personnel; one (Wyoming), unfortunately, specifies that aides may not become involved in the instructional process per se. (p. 60)

However, Zimpfer's statement about the complete lack of certification procedures for paraprofessionals in guidance and counseling may already be outdated. An act that became law in Florida on July 1, 1970 indicates that provisional certification for occupational specialists who work under the direct supervision of a certified counselor was established in that state. In addition, Texas has established a training program for preprofessional and paraprofessional guidance counselors in an attempt to create a career ladder.
in the guidance and counseling profession. J. W. Edgar, Commissioner of Education for Texas, issued a position paper entitled "Guiding Principles to Govern Certification and Assignment of Counselors to the State Board of Education." In it he states:

Preparation programs for counselors shall be designed to provide performance-based master's degree level graduates with professional certification, provided, however, such programs shall also provide bachelor degree graduates with sufficient performance competencies that they may qualify for special assignment permits to serve in guidance-type positions under the immediate supervision of a professionally trained and certified counselor. (Counselor Education Program in Texas, 1972, p. 1)

If Edgar's guiding principles become law, the state of Texas will soon have paraprofessional certification. It is likely that other states have or will soon have similar statutes.

It is conceivable that employers might require the credentials of a fully qualified counselor when selecting applicants for paraprofessional counseling. No information, however, was uncovered indicating that employers considered counselor certification an essential prerequisite for hiring individuals applying for paraprofessional positions. Furthermore, this possibility does not seem likely since with a counseling credential an individual would no longer be classified as a paraprofessional.

c. Other Factors That May Inhibit Employment of Paraprofessionals to Bring Practical Career Information and Activities to Noncollege-Bound Students

(1) Inhibiting Factors

So far in this chapter, an attempt has been made to separate paraprofessional functions from counselor functions within the set of practical career guidance functions and to describe situations in which paraprofessionals performed a variety of counseling and guidance functions. The fact was noted that few credentialing requirements regarding the employment of paraprofessionals exist, showing that these requirements are unlikely to be inhibiting factors in the employment of paraprofessionals to bring about practical career information and other activities for the noncollege-bound. Accordingly, the source of concern about schools' general failure to use paraprofessionals that is signified by the hypothesis needs to be examined.

(a) Counselor Attitudes

As indicated earlier, Zimpfer (1971) found in his 1968 survey of a 4% sample of the American School Counselor Association members who are practicing school counselors in 1968 that: "the responding counselors (87%) were overwhelmingly enthusiastic about the idea of introducing support personnel in guidance." (p. 29.) Zimpfer (1972) states: "Among student counselees, there seems to be little resistance to support personnel." (p. 60.) Yet those programs employing paraprofessionals are still largely experimental. A few support personnel are employed (Zimpfer et al., 1971), but widespread use of well-trained support personnel is still in the future.
Although there is little direct evidence of counselor resistance to guidance paraprofessionals:

... a professional's roots are strongly entrenched in comparison with support personnel. The professional operates from a position of power, and this is a potential major obstacle to development of the support personnel movement. Economy, prestige, and status are all in his favor. (Zimpfer et al., 1971, p. 17)

... subtle resistance [to the use of paraprofessionals] can be uncovered... by observing how counselors plan to use support personnel. Zimpfer's (1969) ACES survey points out that counselors find it comparatively difficult to use support personnel in face-to-face contacts with counselees. They seem to delegate less significant and more data-oriented tasks to support personnel, which in effect separates their own services from those of the support persons. (Zimpfer et al., 1971, p. 18)

This subtle resistance may result from several factors.

Elevating the counselor's role to a professional status analogous to that of a physician or a lawyer has been an evident concern in the literature. Achievement of this goal is perceived as being of benefit to the individual counselor and to the public in general. Dunlop (1969) examined the present condition of counseling in this regard and found it lacking on each of the 10 characteristics of a profession that he listed. The entry of the paraprofessional into the guidance scene in the schools may be perceived as a threat to the evolving professionalization of counseling. Zimpfer et al. (1971) state: "Concern for professional identity and integrity is apparent among counselors as a result of the introduction of support personnel." (p. 16.) Counselors fear that increasing use of paraprofessionals to help in providing guidance services in the schools will dilute the counseling profession at a time when efforts should be directed toward producing more and better qualified professional counselors (Fischer, 1968).

Among the characteristics of a profession that Dunlop (1969) listed are autonomy and responsibility. According to Fischer (1968), counselors fear that many restrictions and directives will accompany paraprofessional use, and Zimpfer et al. (1971) indicate that counselors may perceive the paraprofessional as an infringement on their autonomy. Furthermore, Gust (1968) suggests that the advent of the paraprofessional, who must be supervised, may result in supervision for the counselor himself, a state that is contrary to the professional role model desired by counselors.

A related concern is that schools and agencies will fail to differentiate effectively between the roles and functions of support personnel and the counselor (Whiteley, 1969). Gust (1968) writes that confusion between paraprofessionals and professional counselors can easily arise, especially if agency policy and hiring practices rather than professional consensus actually determine the paraprofessional role. Fischer (1968) claims that counselors fear that pressured administrators will use paraprofessionals to perform
professional functions. The professional and paraprofessional will then become indistinguishable by their duties. Some authorities would solve this problem by listing the functions that paraprofessionals may and may not perform, while others feel this may hamper full use of the paraprofessional in each individual setting. In any case, the lack of a generally recognized paraprofessional role at a time when counselors are striving to achieve professional status constitutes a threat to the evolving professional identity of counselors.

Another possible threat to the professionalization of counseling is the question of whether the professional and paraprofessional roles belong on the same career ladder. As indicated earlier, whether the paraprofessional serves instead of, with, or under the counselor figures in the counselor's reactions to proposals that he be given help. Explicit in the rationale of the New Careers programs is the assumption that the disadvantaged paraprofessional who is trained and employed through the program can eventually work his way into a professional position (Schlossberg, Woodruff, & Leonard, 1971). Zimpfer et al. (1971) mention a general model extending in five steps from teacher aide to professional teacher; this model was recommended to counseling by Bowman and Klopf (1968) in their publication entitled "New Careers and Roles in the American School." Conversely, Patterson (1965) argues that support personnel positions should not be stepping stones to professional counselor positions. Rather, they should be terminal. Patterson's rationale is that individuals selected as support personnel might have differing personality characteristics from counselors. Patterson's position is similar to the one taken by the Committee on Support Personnel for Guidance in the School of the Association for Counselor Education and Supervision reported by Zimpfer et al. (1971):

The Committee does not feel that the career ladder for support personnel should include the professional position of counselor at its top. This creates in the support person an expectation of continuous upward promotion which seems untenable at this time. Such a continuous subprofessional-professional ladder also ignores what may be crucial differences between the characteristics of personnel employed. There is a different career route for the professional, and it is not sequential from the support personnel ladder. (p. 45)

The antithesis to this position is the career ladder concept of Schlossberg, Woodruff, & Leonard (1971) and the career ladder scheme designed by Dameron (1972).

Many authors see a potential problem in acceptance of paraprofessionals in that appropriate counselor functions for the paraprofessional to perform in counseling and guidance have not yet been determined. However, the lack of role definition for the professional counselor himself may be an overriding source of difficulty. Counselors are criticized for not accomplishing many things within the school structure. Many of the services they are expected to provide, however, are so nebulous that they can only be hinted at by listing the general difficulties that American youths are said to experience. In striving to achieve a professional status in the medical or legal sense, the counseling profession tends to define its role in the school by reflecting the public's vague but demanding expectations. With the
present conditions of counselor training and the realities of the counselor's position in the school (e.g., large counselor-student ratios and frequent responsibility for administrative and disciplinary tasks), it seems apparent that a single individual cannot possibly accomplish adequately all the tasks required by the counselor's emerging role expectations. Assistance in the form of paraprofessional support would seem to be welcome. Unfortunately, one cannot profitably delegate tasks necessary to accomplish a goal if the goal and the tasks necessary to achieve it are not clearly in mind. The goal of providing all services to youths that the public and counselors perceive young people need is indeed ill defined.

The counselor may view the use of paraprofessionals as a threat to the quality of guidance and counseling services that will be made available to students (the desire to improve these services is clearly one of the goals of professionalization). As indicated earlier (Fischer, 1968), counselors fear that restrictions and directives will accompany paraprofessional use. If this is the case, professional counselors may seek situations in which there are fewer restrictions and a high counselor attrition rate in the schools will result (Fischer, 1968). This could also lead to fewer and less extensive counseling services for students. Bowman & Klopf (1968) found that professionals doubt that adequate time would be made available to them during the school day for planning and evaluation with the paraprofessional they would supervise. Without adequate provision for these functions, the introduction of paraprofessionals could not be expected to result in improved services to students and could result in chaos.

Furthermore, some of the concern of counselors that the quality of services available to students may be diminished with the advent of paraprofessionals is possibly tied to the counselor's perception of one of his skill areas. Training for supervisory and personnel-management skills is not usually included in counselor preparation programs. Counselors are not likely to feel qualified in this area nor are they likely to feel comfortable devoting their professional time to training paraprofessionals when they perceive that this time could be used for direct client contact. Moreover, Bowman & Klopf (1968) discovered that a few professionals in their study feared—that students might respond more easily to the paraprofessional than to themselves and thus the professionals might lose even more personal contact with students. Zimpfer (1972) suggests that supervising counselors seek to develop knowledge and skills in supervision and training of paraprofessionals.

One final reason why counselors may prefer not to advocate paraprofessional programs is their perception that increased clerical assistance will improve the quality of services for students more than paraprofessional assistance. Munger (1968) made such a point indirectly when he reported: "Many counselors have said that what they need in support personnel is a good clerk who can type and who can help with information gathering services." (p. 81.) Liddle and Kroll (1969) were more direct. They recommended: "To avoid the use of professional personnel for nonprofessional tasks, more clerical assistance must be provided." (p. 143.)

(b) Attitudes of School Administrators

Because a consensus that can be translated into law has not been reached regarding details of the paraprofessional role in counseling and
guidance, school administrators may be reluctant to hire paraprofessionals, fearing that they might encounter legal difficulties over the assignment of responsibility (Zimpfer, 1972). Bowman & Klopf (1968) identified other sources of difficulty for school administrators considering the use of paraprofessionals to relieve some of the pressure to provide guidance and counseling services in the face of chronic shortages of professional personnel. Administrators were largely concerned with implementation problems such as setting up fiscal policies and the process of developing a new hierarchy of positions (e.g., determining job descriptions, job titles, salaries, increments, role prerogatives, and training requirements for advancement). Administrators were also faced with the problems associated with promoting a new paraprofessional program with principals, teachers, the Board of Education, and the community.

Since there apparently is no ready source of well-trained paraprofessionals from which school districts can select employees, administrators must either hire unprepared paraprofessionals, develop their own training programs, or assign training responsibilities to already overburdened counselors. Each of these alternatives must appear somewhat unattractive to administrators. Other alternatives, such as having counselor educators assume responsibility for training paraprofessionals, do not seem feasible. Jones & Cox (1970), who conducted a study to determine if the heads of counselor education programs across the nation agree on what functions are appropriate for support personnel assisting secondary school counselors and to determine who should take responsibility for their training, concluded:

There was...significant agreement on the responsibility for training support personnel to perform each [counseling] function [which was consistent with the APGA policy statement of 1967] (with the exception of job placement and referral to outside agencies). The counselor is perceived as having the major responsibility for training support personnel in all of the appropriate functions except group test administration and fact-finding interviewing. These were considered the responsibility of counselor educators. (p. 54)

Munger (1968) claimed from attendance at five regional conventions of ACES, in which he participated as their national president, that counselor educators prefer not to train paraprofessionals. The consensus of those he talked to was that counselor educators have not yet had adequate time and energy to devote to the preparation of professional counselors themselves. Workable two-year training programs have not yet been established, and Munger felt it was understandable that preference be given to the preparation of counselors according to ACES standards. However, Cash (1971), a later ACES president, challenged the Association to give serious consideration to the education of paraprofessionals.

Some information points to the junior or community college as an emerging alternative for solving the paraprofessional training issue. The results of a study of counselor aide use in California (Blaker et al., 1971) showed that increasing numbers of community colleges now offer training to guidance paraprofessionals. Three of the 60 colleges reporting offered training in 1969, and in 1970 seven more were initiating programs. Two others
were considering developing programs in the near future. Zimpfer et al. (1971) report the following observations from Merrill on the junior college as one model of paraprofessional training:

Merrill believes that support personnel training should be carried out in the two-year college. First, these colleges are searching for new ways to serve their communities. Secondly, college credits provide both transferable skills (not limited to given work setting), transferable credits (more readily credited in other localities than in-service credit), and the potential for upward movement. She believes that these latter considerations are critical to the continuing welfare of support personnel. (p. 21)

Despite these signs that community colleges may be emerging as settings in which guidance paraprofessionals may obtain training, school administrators will continue for some time to be faced with the issue of who is going to train the guidance paraprofessional they would like to employ in their schools.

(c) Lack of Paraprofessional Organizations

Zimpfer (1972) wrote that paraprofessionals at the local level seek unity but have no professional organization to speak for them.* He indicated that APGA has been urged to "adopt" support personnel in guidance and speak for their special interests. Zimpfer et al. (1971) found that:

No statements or reports of experiences regarding collective negotiations by or for support personnel were discovered in the literature. (p. 21)

The lack of organizations to represent paraprofessionals leaves them in a weak position for furthering their interests. Although Zimpfer et al. (1971) found little if any evidence of direct resistance to the advent of paraprofessionals from counselors' professional organizations, these same organizations may be fighting the introduction of legislation on the behalf of guidance paraprofessionals. Teacher associations may also offer some resistance. As funds for education are cut back, these organizations are likely to promote hiring unemployed teachers and dissuade school districts from employing lower salaried paraprofessionals (Mitchell, 1972).

(2) Suggestions for Implementing Successful Paraprofessional Programs

The literature contains several suggestions that may ease the introduction of paraprofessional guidance workers into schools. Blaker et al. (1971) advised that planning for the counselor assistant responsibilities and his careful selection, preservice training, and in-service training and supervision were critical. Zimpfer (1972) elaborated:

*The California Personnel and Guidance Association (CPGA) is in the process of changing its bylaws to permit support personnel to join as affiliate members. At present, the Black Caucus, a Division of CPGA, accepts support personnel members.

6-19
Thoughtful orientation and supervision are critical elements if use of support personnel is to be successful. There are numerous dangers to their survival and development. Generally, a support person has never experienced the school atmosphere from the professional's viewpoint, nor is he aware of current education goals, curricula, or methods. Often, his role is undefined and ambiguous, as is his relationship with the counselor who is also experiencing a new role. If the support person's socioeconomic background differs from that of people in the school or college, his differences in values, ways of offering help, personal habits or speech may interfere with his performance. If he has been forced to fend for himself all of his life, unwillingness to ask for help when needed or harsh rejection of clients in trouble can result. If the support person has problems similar to a client's and has not managed to control these, he can over-identify with the client, thus losing his objectivity and effectiveness.

Counselors would do well to sharpen their counseling skills for use with their own support personnel. They should be urged to include support personnel in planning sessions, in order to give them a sense of being trusted and involved. Instruction, feedback, and encouragement are needed on a regular basis. The first few weeks of a support person's employment have been found to be especially crucial in setting the tone for the whole relationship and in determining the rise or fall of the position and the person who fills it. (p. 60)

A feature of the Counselor Assistant Project (Salim & Vogan, 1968) may have contributed to the success of its experiment in training and introducing paraprofessionals into the school guidance program. They believe that development of positive interpersonal working relationships between the professional and paraprofessional is necessary to resolve role conflicts and other problems. Project staff external to the school contributed significantly during regularly scheduled meetings with counselors and their aides.

Bowman & Klopf (1968) offer the following comprehensive advice on the process required to develop and institute paraprofessional programs in such a way that the full promise of paraprofessional assistance for counselors can be realized:

That the whole range of...functions be re-examined, so as to identify those that might be performed by nonprofessionals...[and] to identify the more complex and highly professional functions which should be performed by a[professional]....

That role specifications and prerogatives of auxiliaries be clearly defined, in order to prevent either their under-utilization by unconvinced professionals or their overutilization by harried administrators.

That there be preservice training of auxiliaries to develop communication skills and other concrete skills as well as the basic understanding needed for success during their first work experience....
That all preservice training include a field...experience where professionals and nonprofessionals can try out and evaluate their team approach under the close supervision of the training staff.

That there be orientation of both the administrators and the professionals with whom the auxiliaries will be working....

That there be a comprehensive, continuing, in-depth program of development and supervision of auxiliaries closely integrated with a long-term program of stable, open-ended employment, so that each level of work responsibility will have comparable training available.

That the cooperation of two-year...colleges [and institutions of higher learning] be sought in the development of programs for auxiliaries who would move into roles requiring more knowledge and skills than at the entry level....

That when and if a school system decides to utilize auxiliary personnel, the program be incorporated as an integral part of the school system, not treated as an extraneous adjunct to the system.

That there be cooperative planning by the school systems, local institutions of higher learning and the indigenous leadership of the community....

That each step on the career ladder be specified in terms of functions, salaries, increments and role prerogatives....

That time be scheduled...for...professional-nonprofessional teams to evaluate their experiences and plan together.... (pp. 128-132)

From the perspective of Bowman & Klopf's recommendations, it is not difficult to ascertain what is necessary to promote and sustain the employment of paraprofessionals to provide practical career guidance services to noncollege-bound students, namely profound change in the entire educational system. Lack of any credentialing possibilities, rather than overly restrictive credentialing requirements, is one apparent cause of the virtual nonexistence of regularly employed guidance paraprofessionals in schools.

d. Summary

Although there is general agreement in the literature that counselors should have the assistance of support personnel, there is little consensus on the exact duties that support personnel can and should perform. Guidance paraprofessionals have been employed experimentally in diverse settings and have executed functions ranging from clerical assistance to individual counseling of students. Expert opinion and surveys of counselors, counselor educators, and counselor employers indicate that most individuals believe that paraprofessionals should be supervised by professional counselors and that individual personal counseling and other functions requiring the use of judgment should be reserved for the professional.
Paraprofessional functions that are mentioned frequently are: collecting, organizing, analyzing and giving out information on educational and occupational opportunities; administering and scoring tests; serving in community liaison roles; performing routine clerical tasks and record keeping; conducting outreach, placement, and follow-up activities; orienting and scheduling students; and leading group discussions.

Efforts have been undertaken to integrate the functions of paraprofessionals and professionals in guidance and counseling programs, and a position has been advanced by a committee of ACES. However, the relationship of the two roles and the outcomes to be achieved through paraprofessional assistance have not been delineated.

In general, the literature supports the following conclusions related to the hypothesis examined in this chapter: "Credentialing requirements inhibit employment of personnel with work experience and paraprofessionals who might be able to bring about practical career information and activities to the non-college-bound."

1. Employment of paraprofessional guidance workers in the schools has not yet become an established practice. Since only scant and scattered credentialing requirements apply to their hiring, this chapter's hypothesis should be rejected. Other factors seem to inhibit the employment of paraprofessionals. Few if any organizations represent them. Activity in these areas is developing in several states and within at least one organization (CPGA), but this activity is quite recent and is unlikely to be a factor in the failure of schools to employ paraprofessionals.

2. Resistance to the use of support personnel in high school guidance and counseling programs may result from the counselor's desire to develop a more professional role for himself or from his fear of diluting the quality of services available to students. School administrators are concerned with legal difficulties and implementation problems likely to be encountered in the advent of paraprofessionals and with issues related to paraprofessional training. Other groups with vested interests may also be impeding the employment of guidance support personnel.

3. Several factors could contribute to the successful introduction and functioning of paraprofessional guidance workers in the school. These include the type of careful program planning (through cooperation with local colleges and community leaders) that results in a clear statement of the functions of paraprofessionals and the relationship of these functions to the roles of other staff members, preservice training and orientation for both professional and support personnel, development of the paraprofessional program as an integral part of the school system, availability of in-service training for support personnel, careful supervision of support personnel, and provision of opportunities for support personnel and supervising counselors to meet for feedback and planning and evaluation activities.
e. **Recommendations**

On the basis of the information reported in this chapter, the following recommendations are made:

1. Efforts should be undertaken to clarify the role of support personnel in high school guidance and counseling programs. Further work is necessary to state clearly the goals their employment is to achieve in terms of outcomes for students. Research should then proceed to determine: (1) the skills necessary to facilitate these outcomes; (2) the training required to develop these skills; and (3) how functions or tasks may be partitioned between professional and paraprofessional to provide the most effective assistance to students.

2. The results of the efforts described above should be applied to lessen the subtle resistance of counselors and other school personnel to the use of paraprofessionals and other assistance originating outside the educational establishment. Informational and promotional activities will be required both for the professionals and for those who seek to assist them.

3. Local programs for employment of support personnel in high school guidance and counseling services should be planned and established, with full regard for the factors known to contribute to the success of such programs. Further investigations into factors that contribute to the success of paraprofessional programs should be undertaken, and all available information should be summarized and made easily accessible.
6. The functions of guidance and counseling personnel working with noncollege-bound students have not been realigned to provide practical career guidance services.

a. Introduction and Relationship to Other Hypotheses Underlying This Review

As indicated in Chapter 1, this review synthesizes evidence on the realignment of practical career guidance and counseling for noncollege-bound students that has occurred since 1968. In commissioning work on the review, the U.S. Office of Education first declared that the public accepted the need for practical career guidance and counseling. The Office next argued that in 1968 "...students needing vocational guidance and counseling assistance and school placement services rarely received them." (RFP 72-42, p. 1.) Finally, the Office claimed in 1972 that "...current reports indicate that the needs of non-college-bound students have still not been met." (RFP 72-42, p. 1.)

This review accepts the Office's assumptions about the current need for practical career guidance and counseling for noncollege-bound students and investigates the dimensions of the realignment needed to satisfy the identified need. USOE made the first step in determining the dimensions of needed realignment by stipulating six hypotheses that served as the review's outline. The first five of these hypotheses define conditions and needed realignments in the following terms:

1. Women, minority students, and students from low income families have not obtained occupational information and assistance in relating their abilities and interests to career options and specific skills training programs.

2. Placement services operated within the school improve school accountability, and promote and enhance the relationship of the school with business, industry, and other agencies providing jobs for students.

3. Current experiments with computerization of information for counseling and guidance purposes do not appear to be cost-effective; other media, methods, and materials must be developed to provide career information.

4. The education and training of guidance counselors have not prepared them to perform the practical career guidance and counseling needed by the noncollege-bound.

5. Credentialing requirements inhibit employment of personnel with work experience and paraprofessionals who might be able to bring practical career information and activities to the noncollege-bound.
Since the major purpose of the review is to provide an opportunity for individual assessment of the extent to which vocational guidance and counseling functions have been realigned since 1968, the review concludes with the hypothesis covered in this chapter:

6. The functions of guidance and counseling personnel working with non-college-bound students have not been realigned to provide practical career guidance.

b. Priorities Given to Functions Performed by Guidance and Counseling Personnel

A number of studies yield data on the time question. Mitchell (1965) asked students to report the general content of guidance conferences over a 42-day period; 601 contacts were tabulated in all. The breakdown by area was as follows:

<table>
<thead>
<tr>
<th>Area</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program planning or change</td>
<td>43.5%</td>
</tr>
<tr>
<td>Classroom problems</td>
<td>14.6%</td>
</tr>
<tr>
<td>Problems with other students</td>
<td>0.2%</td>
</tr>
<tr>
<td>Attendance</td>
<td>7.5%</td>
</tr>
<tr>
<td>College or school advisement</td>
<td>17.5%</td>
</tr>
<tr>
<td>Vocational or career planning</td>
<td>7.6%</td>
</tr>
<tr>
<td>Other problems</td>
<td>9.1%</td>
</tr>
</tbody>
</table>

This study examines the use of counselor time only in one-to-one counseling sessions. These counselors undoubtedly performed other functions but, within this context, college considerations received more than twice the amount of counselor time and attention compared with the area of career planning.

Campbell (1968) conducted a 1966 national survey of school personnel, parents, and students from 353 schools in 48 states. The focus of the survey was on determining the status of vocational guidance in those schools. Among the results were the following:

1. Counselors typically devoted the largest block of time to counseling individual students (40%); this individual counseling focused more on college education than on any other subject.

2. Students sought educational guidance most frequently, followed in order by vocational guidance and personal adjustment counseling.

Another breakdown of counselor time is provided by Armour (1969), who reports a nationwide sampling of counselors by USOE. The tabulations yield the following breakdown of counselor time by task area:
1. 32%—educational counseling (school course selections)
2. 25%—college counseling
3. 23%—therapeutic counseling
4. 20%—vocational counseling.

Kaufman, Schaefer, Lewis, Stevens, & House (1967) studied the role of secondary schools in the preparation of youth for employment. They report:

1. Counselors typically are engaged 10% of the time in keeping records, 50% in conducting interviews, 8% in administering tests, 2% in handling disciplinary problems, 19% in consulting with teachers, and 11% in other general activities.

2. Except in separate vocational-technical schools, most guidance and counseling personnel were college oriented and depended on students to take the initiative in seeking information with which to make a vocational choice.

Phipps (1968) sent a questionnaire to 270 secondary school counselors in Kentucky, of which 207 responded. In response to the question: "In general, do you think counselors are as interested in helping students who are not planning to attend college as helping those who are planning to attend college?", 49% said yes and 51% said no.

In response to the question: "What is your preference for working with a particular group of students?", 57% indicated no preference, 36% indicated college preparatory, and 7% indicated noncollege preparatory.

In response to the question: "What is your feeling of responsibility to particular groups of students?", 74% indicated equal responsibility, 14% indicated college preparatory students, and 12% indicated noncollege preparatory students.

c. Evidence That Priorities Represent a Realignment in Guidance and Counseling Functions to Provide Practical Career Guidance Services for Noncollege-Bound Students

All of the studies referred to above reveal that vocational counseling or provision of practical career guidance for noncollege-bound students suffers in favor of precollege counseling in particular and other counselor functions in general. However, there is some indication in state and federal vocational education annual reports that priorities may be shifted in the future. A comparison of current reports with those of previous years reveals that the states are urging that shifts in priorities take place, but there is little evidence that changes have actually occurred in resource allocations. A longitudinal study comparing the status of guidance and counseling functions at two separate points in time or, as a minimum, an investigation of guidance and counseling functions in schools within the past year or two would be necessary.
to provide convincing evidence that priorities are being realigned to meet the needs of noncollege-bound students. The latter investigation would permit a comparison with the data reported earlier, which were collected between 1965 and 1969. However, no such studies were uncovered.

The studies described earlier provide evidence that expansion and realignment of practical career guidance services and counselor functions are required to meet the needs of noncollege-bound students. This evidence is also substantiated by a vast body of professional opinion. These opinions constitute a type of supplemental data indicating that realignment has not taken place. Recommendations calling for alignment of counselor functions with practical career guidance needs of noncollege-bound students are documented in Chapter 2. Chapter 3 highlights expert opinion calling for realignment of placement and follow-up services. Chapters 4, 5, and 6 present opinions addressing the need for realignment in the means that the educational system uses to meet practical career guidance needs of noncollege-bound students.

Even though the literature strongly urges realignment, it is often vague about the types of changes needed to bring about alignment. Some specific details about needed alignment can be gleaned from the literature but the majority of the literature contains no details or guidelines for counselors or schools to follow in realigning counselor functions. The way in which needed alignment should be implemented is a subject to which the literature devotes too little attention.

As indicated, the literature surveyed reveals little evidence that schools are moving to bring about better alignment of counselor functions with practical career guidance needs of noncollege-bound students, although some schools are apparently making preliminary efforts in this direction. In another phase of this project to assess career guidance, counseling, and placement services for noncollege-bound students, these schools have been visited so that case studies could be written describing their efforts. Therefore, data on realignment taking place in selected schools are presented in other documents emanating from this project.

The apparent disproportionate emphasis on college-bound students revealed by the literature can perhaps be explained by national priorities on identifying academically talented that developed in the late 1950s. In line with these priorities, money was made available and state plans established. It now appears that different priorities may be emerging, but they have not yet influenced allocations of time and resources to any appreciable extent. Changes that have occurred are largely experimental in nature and have not often been integrated into the operation of the typical school.

d. Realignment Hypothesis

Underlying the question of the kind of realignment in practical career guidance and counseling that is necessary to fulfill the needs of noncollege-bound students is the problem of a standard to which alignment is compared. This review uses one standard in its report on the literature and another in its recommendations. The U.S. Office of Education hypotheses largely determined
the literature that was surveyed. The principles of synthesis attributed to the authors in Chapter 1 largely determined the recommendations that accompany the summaries of succeeding chapters.

As indicated in Chapter 1, the authors believe that career is life development in the areas of occupation, education, personal and social behavior, learning how to learn, social responsibility, and leisure. Such development can occur through sequential career education and can be influenced by practical career guidance, counseling, and placement functions.

Career education, as the authors see it, should encompass the totality of possible patterns of personal choice related to each student’s total life style. One part of such career education should embrace a program of vocational guidance consisting of:

1. Early vocational orientation experiences that will help students understand themselves and the world of work.

2. Opportunity for students to explore and test occupational realities before they make occupational decisions. Services to this end should enable students to engage in real or simulated work experiences.

3. Services that successfully change the prevailing school climate to help youths gain a more positive view of what is possible in their lives.

4. A total school experience for students that is highly relevant to their needs. One vocational guidance goal should be to provide feedback to other members of the school staff that can facilitate curriculum revision.

5. Counseling personnel working cooperatively with other school personnel to ensure continuity in guidance services.

6. Intensive counseling at the time of occupational and educational decision-making that will lead to vocational selection and specialization.

7. Relevant, accurate information as an important component in decision making. Counseling personnel should be responsible for helping students to acquire information about their talents, about posthigh school educational and training opportunities, and about job placement opportunities relevant to particular communities and worlds in which they live.

8. Placement and follow-up assistance in actualizing vocational decisions. These services should identify and coordinate student use of existing nonschool placement services and provide additional services that are not offered by other community agencies. Follow-up data on experiences of former students can provide useful information for those students currently making decisions. Follow-up services can also help originally placed students to continue in vocational development.
An adequate career planning and development system in career education will require a similar set of functions for each of the other five areas that the authors incorporate in the term "career."

As noted above, guidance functions are not as narrow as counselor functions. For the authors, guidance rather than counseling is the generic term. It includes instruction, counseling, evaluation, and support procedures (including placement and follow-up) based on individual planning and development needs of youths. Guidance signifies the total content and process of programs aimed at assisting young people to develop and protect their individuality and potential. On the other hand, counseling is the interpersonal process that is one alternative for helping youths achieve guidance-related objectives. In this process, counseling-personnel (e.g., counselors, teachers, paraprofessionals, administrators, and school psychologists) interact with students individually or in groups to facilitate youth career planning and development.

Students must be helped to comprehend their needs so that they can themselves develop careers within career education. The authors define a need as the discrepancy between a student's current status and desired status. This concept of need indicates the direction in which that student wants to move. Therefore, assessment of needs should appraise where youths are rather than where the system is. System-oriented needs refer to institutional or organizational requirements such as the need for more counselors. Although these are important, their consideration is premature in the absence of identified individual needs. System needs become relevant when consideration is given to how student needs will be met.

Although individual comprehension of personal needs is a major purpose of guidance and counseling in the authors' system, they also incorporate individual planning as a major means of achieving this goal. In comprehensive career education, instruction and guidance should be tailored to each youth's personal characteristics, background or experience, needs, and career goals. Each student should repeatedly have opportunity to engage in a process, i.e., individual planning, of selecting his goals and planning activities to achieve them. Each student's learning activities are thereby made more relevant and meaningful to him because he evolves purposes and plans for their attainment. School personnel are available to help youths assess their potential and limitations, discover their needs, delineate personal short range and long range goals and related objectives, and develop a program of studies to achieve each of their goals. Thus, the organizing, humanizing core of career education is in its personal needs and individual planning activities, two of the three central activities of individual purposeful action. Career planning and development are most satisfying for youths when they not only know their needs and form their plans but also act on goals that they have either selected themselves or agreed on. However, without individual planning, career education either imposes society's goals on youths or confuses students by not informing them of the goals and objectives of their instructional activities.
At the core of the authors' assumptions rests the major goal of helping youths learn about and take responsibility for their own behavior. The authors believe that youths should be free but that they need to master the conception of purposeful action to remain free and responsible.

The major goal of a person providing career guidance, counseling, and placement, therefore, must be to get students to think in terms not of attaining the counselor's goals, but in terms of evolving their own goals. The counselor's goal is to get a student to compare his current experiences with desired experiences, keeping in mind that desired experiences do not exist (they are only a concept of what might be). Nevertheless, it is possible to compare what is with what might be and to note differences or needs. When a student notes a difference or need, he can then choose, develop, modify, and perform (plan and act individually) so that he moves from where he is toward where he wants to be. This process of comparing existing with desired and thereby ascertaining one's need, of individually planning to secure the desired, and of acting contingently on that plan and its modifications constitutes purposeful action. It is self-initiated, self-corrected action directed toward satisfaction of individually known needs through implementation of individually planned acts whose effects are individually evaluated, re-integrated to the individual whole, and redifferentiated into a new cycle of need, plan, action, and personally evaluated feedback.

During the last five years, the authors (or at least some of them) have employed a comprehensive planning system to develop, implement, evaluate, and revise youth-oriented programs. The systematic planning approach used includes five phases of activities, which are described below.

In the first phase of planning a comprehensive career guidance system, program planners must define the subpopulations constituting the total range of students, specify the desired terminal competencies of individual youths in these groups, identify the current status (entry level) of these competencies among youth, and develop meaningful statements of needs. These statements of needs must: (1) describe the extent and nature of the discrepancies between these entry and terminal levels and (2) be capable of being translated into goal statements and related performance objectives. Such products can be achieved through interviewing random samples of students and adults from target populations, identifying priority needs of youth, and translating these priority statements into statements of goals and performance objectives for the system.

In the second phase of system planning, the goal statements and related performance objectives are organized into groups or clusters of goals and objectives to facilitate other planning phases. For example, they can be organized by areas of student needs, i.e., educational-vocational, learning how to learn, and others, by personal problem-solving competency areas such as generating alternatives and selecting preferred alternatives, or by uniting these areas and problem-solving competencies, thus forming guidance programs.
that focus on a broad range of planning, goal selection, and management skills.

The third phase of activities in the systematic approach to developing and evaluating guidance programs entails exploration and selection of suitable learning experiences for youth. Clear statements of priority needs, goals, and related objectives permit creativity in the investigation of a wide range of possible instructional and counseling procedures. The authors have:

1. compiled a body of techniques appropriate to the performance learning specified in key objectives,
2. evaluated the effectiveness of some of the currently available procedures, and
3. conducted developmental work where suitable strategies were not available. From this wide range of available instructional and counseling procedures, guidance program planners in concert with the authors have been able to select the ones they deemed most appropriate for certain target population students. These procedures have incorporated materials such as films, film-strips, slides, books, magazine articles, audio-tapes, job experience kits, simulation games, developed abilities tests, interest inventories, and values inventories.

A fourth important phase of the systematic development of career guidance programs entails describing in the form of process objectives the selected counseling, instructional, and placement procedures for helping youth target groups reach their career planning and development objectives. An important assessment method entails determining whether the implementation strategies in which school personnel needed to engage to employ these procedures were actually implemented as designed. Such assessment would include determining if career guidance programs allocated resources and services in such a manner that process objectives were achieved and were achieved efficiently. Sample assessment questions of this type would be: Was a schedule drafted for obtaining the necessary staff services and equipment resources? Was the schedule adhered to? Were the required tasks and competencies of counseling personnel identified and linked to appropriate training activities? Were the necessary staff development training programs conducted? These process objectives and implementation strategies focus on five of the six hypotheses reviewed for the U.S. Office of Education.

A final phase in the design of career guidance programs entails comprehensive and reputable evaluation and revision of each program's desired impact and unanticipated effects. This should emphasize formative evaluation, focusing on improving guidance resources, and summative evaluation, focusing on determining the overall impact of guidance resources. Both types of evaluation are expedited by the application of a comprehensive planning process to the development of guidance programs. This ensures that such programs are based on the needs of youths and that these needs are represented by measurable (behavioral) objectives for youths. Both evaluation strategies assess:

1. the effect of each program by comparing changes in the behavior of students who did and did not receive it;
2. the reactions of youths, parents, and school personnel to these programs; and
3. the unanticipated outcomes of these programs. Major emphasis is placed on the use of end-of-unit and survey instruments for criterion-referenced evaluation based on the knowledge, attitude, and overt behavioral outcomes that youths achieve. Case studies, questionnaires, interviews, and observation techniques can be used to assess some of the long term effects of these programs.
As indicated in this review, traditional evaluations of guidance and counseling systems have depended almost exclusively on collecting subjective reactions to the purposes and impact of such systems. They have emphasized means and typically have ignored ends. Even the means or procedures have emphasized process objectives written for staff rather than youth outcomes. In addition, they have engaged in inadequate or inappropriate evaluation, which often can be traced to the fact that evaluation considerations are introduced after a program has been initiated. Also, in many instances, objectives have not been defined in terms conducive to reliable and valid measurement—i.e., in language that expedites program improvement and assessment of its impact. Another factor relates to the lack of meaningful results from evaluation activities that have been undertaken. Few people see any direct examples of how evaluation findings have been used to make day-by-day decisions regarding program cost-benefit relationships or program improvements. A final problem relates to the lack of consensus on the concepts of evaluation and monitoring and how they can be distinguished. In some cases, monitoring was described as being synonymous with evaluation. Evaluation is a process that, if well defined, should shape and facilitate all monitoring activities. Clarification of these two concepts is highly desirable.

e. Summary, Findings, and Recommendations

Summary points related to the review's hypotheses are presented here; detailed recommendations are given in the respective chapters that cover these hypotheses. Recommendations related to the sixth or realignment hypothesis are implicit in those chapters' recommendations, and the major ones are listed at the end of this section.

1. The literature on the hypothesis that women, minorities, and students from low income families have not obtained practical career guidance and counseling suggests that the hypothesis is partially true.

2. The literature on the hypothesis that placement services in school promote accountability and good relationships with the business community was not supported or rejected by evidence but is a view held in common by many who advocate in-school placement services.

3. The literature failed either to sustain or to reject the hypothesis that computerization of counseling and guidance is not cost-effective and that other media need development as a result.

4. Data in the literature were not sufficient to accept or reject the hypothesis that the education and training of counselors have not prepared them to perform practical career guidance and counseling for noncollege-bound students.

5. The literature contains few and fragmentary data on the fact that credential requirements inhibit employment of personnel with work experience and paraprofessionals.

In general, it appears that women, minority students, and students from
poor families need different personal and occupational information and help than they have been receiving. Furthermore, the education-community relationship needs renewed attention and improvement. Media used in guidance and counseling generally need study to determine their cost-effectiveness. Counselors need to become more aware of the world of work and its demands on individuals, and paraprofessionals need incorporation into the guidance and counseling framework. In regard to progress that has been made in meeting these needs in guidance and counseling since 1968, two issues were examined in the literature related to the realignment hypothesis:

1. The priorities given to functions performed by guidance and counseling personnel (in terms of their time).

2. Evidence that these priorities represent a realignment in guidance and counseling functions to provide practical career guidance services for noncollege-bound students.

The purpose of examining these issues was to uncover the extent to which school boards (and their administrators) have restructured the functions and tasks of guidance and counseling personnel in the schools toward a closer alignment of these activities with the practical career guidance needs of noncollege-bound students.

In view of the system planning considerations described in the preceding section, the authors implicitly looked for confirmation or denial of the following four additional hypotheses in conducting this review:

1. The target student populations (including the subpopulation of noncollege-bound students) have been clearly delineated and their priority career guidance counseling and placement needs have been identified.

2. Program product objectives have been stated in terms of measurable student outcomes that have been derived from priority youth career guidance counseling and placement needs.

3. Program process objectives have been stated in terms of instructional and counseling procedures and materials appropriate for helping students attain desired outcomes and implementation strategies have been planned in terms of counseling personnel services and school resources required to implement process objectives.

4. Program product objectives have been met, program process objectives have been achieved, and program implementation strategies have been employed as planned at an acceptable cost per student.

The review clearly shows that these four hypotheses cannot be accepted. Target populations are ordinarily not clearly delineated in writing about counseling and guidance. Program product objectives are rarely stated, and they are almost never stated in terms of measurable student outcomes. Occasionally program process objectives have been stated in terms of education of counselors; however, this is not the general practice and counselors generally
fail to state program process objectives in terms of instructional and counseling procedures and materials appropriate for helping students attain desired outcomes. A new round of recommendations of instructional and counseling procedures and materials is developing but those in guidance practice do not yet seem to be participating in that round themselves. Some computer guidance systems are doing the job for counselors, but the counselors are seldom involved themselves. Finally, in the absence of product and process objectives at the student level, the objectives have obviously not been reached and the question of the cost of such achievement therefore represents an area that will require further investigation.

As stated earlier the literature on the time given to guidance and counseling of noncollege-bound students indicates a disproportionate emphasis on college-bound students and their decisions and a consequent lack of emphasis on the noncollege-bound students. Some schools are apparently making experimental efforts in this direction, but the effects of these efforts have not yet been felt generally.

On the basis of information reported on this hypothesis, the following recommendations are made:

1. Experts in the field of guidance and counseling should refrain from merely urging people to work toward realignment and should provide more specific information on how to bring about realignment.

2. Realignment should be based on a planning system that includes an assessment of the priority needs of the target population that will be served. The system must also include a statement of product and process objectives, determination of appropriate strategies to meet the objectives, and an evaluation of all efforts.

3. A consistent effort must be made to take advantage of the results of research and pilot projects. There appears to be considerable difficulty in moving from successful demonstration projects to full-scale projects that benefit a broader spectrum of the curriculum. It would be beneficial to concentrate on the dissemination of successful efforts so that other locations can profit from the mistakes and triumphs of demonstration projects.

4. If guidance systems are to be realigned to meet the genuine needs of youth as conceived in the authors' proposed system, the type of rigorous program development attempted in a comprehensive career guidance system along with evaluation designs and procedures should be implemented. The potential to conduct such development and evaluation requires explicit, clearly defined, and measurable program objectives and accurate knowledge of the practical and political context in which judgments concerning achievement of these objectives must be made. Then, data generated by a program must be correlated with these objectives, specifically related to the behavior of members of the target population, collected accurately, presented in
easily interpretable form, and provided in time to be used by
decision-makers at all levels with a means for evaluating cost-
benefits and cost-effectiveness.

Two additional products of the contract under which this literature review
was produced include: (1) a series of case studies and (2) a final report.
Thirteen programs which are making an illustrative attempt to deal with the
needs of noncollege-bound youth were identified and described in 13 separate
case study reports. The final report, which is entitled Planning, Structuring
and Evaluating Practical Career Guidance for Integration by Noncollege-Bound
Youths, summarizes the findings and recommendations of this literature review,
synthesizes the case studies, and outlines and illustrates a planning-evaluation
model which program personnel may use in developing local career guidance programs
for noncollege-bound and other youths.
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