

BLENDING CAREER EDUCATION INTO THE MIDDLE SCHOOL INSTRUCTIONAL
PROGRAM: A MODEL FRAMEWORK FOR TEACHER IN-SERVICE PROGRAMS

by

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Chapter 1

INTRODUCTION

Career education has gained much national acclaim within a period of five years. Since 1971, it has received the special attention of the United States Office of Education (USOE) and the recognition of a growing number of Americans. In this time span, much has been accomplished in the way of establishing "career education" as a legitimate educational concept. This has been due in part to the following factors: (1) direct action taken by USOE (USOE, 1972; Taylor, 1972); (2) the growing recognition of its value in educational circles (McDaniels, 1974; Hoyt, 1973), and (3) the willingness of many educators at national, state, and local levels to experiment with career education practices (Miller, 1972; Hannah and Kazanas, 1974; Ohio State University, 1974; California State Department of Education, 1972; Mesa, Arizona Public Schools, 1973). According to a number of writers, few concepts introduced into the American educational scene have met with as much interest and discussion as has career education (U.S. Chamber of Commerce, 1973, 1975; Drier, 1972; Bottoms, Evans, Hoyt, and Willers, 1972).

Sidney P. Marland, former Commissioner of Education, has been identified as one of the most influential advocates of career education (Bailey and Stadt, 1973). The interest and enthusiasm

generated by career education, its intent, and pressing needs are described by Marland (1974) in these words:

The national dialogue that has developed indicates strong support and a real sense of urgency on the part of industry, civic and ethnic groups, members of congress, state and local officials, and most of the educational community in making career education an integral theme in the fabric of education from kindergarten through points--beyond the graduate years.

. . . The dictotomy between academic and vocational courses has never before had so great a chance of being eliminated. . . . I hold that career education adds to the sum of the educational parts and does not threaten the established curricular. It seeks articulation with conventional offerings, giving them purpose and meaning at a time when youth are searching for purpose and meaning.

Further evidence of the popularity of career education is seen in the initiation of the Journal of Career Education in the summer of 1974 and also in the appearance of major features on career education in most educational periodicals or of special issues devoted to professional discussions of relevant aspects of the career education concept. And additionally, in order to facilitate the achievement of career education goals, the U.S. Office of Education has made substantial efforts in research and development activities. The National Center for Educational Research and Development has concentrated on the development of four models of career education and alternate ways of facilitating career education goals (Ryan, 1975).

According to Hoyt (1975), Bailey and Stadt (1973), and Marland (1971), American education is based on the assumption that intervention (i.e. schooling) during the formative years of childhood and adolescence prepares individuals for adult roles in society. These writers point out that in the past the schools have not fulfilled this purpose well for a number of students. Hence, a proposition that the

curriculum should be adjusted to take into account the career developmental aspects of growth and learning is advancing.

PURPOSE OF THE STUDY

The purpose of this study was to provide a model framework by which classroom teachers in middle schools may develop additional competencies needed for the blending of career education instruction into the educational system.

NEED FOR THE STUDY

Among the critical issues confronting many school systems which are introducing career education in the curriculum is staff development, particularly the preparation of teachers. This need for a framework for accomplishing the teacher preparation phase of career education programs has claimed the attention of a number of writers (Taylor, 1973; Goldhammer, 1971; Hoyt, 1972; Keller, 1974). Marland (1974:10-12) perceived classroom teachers as being the catalyst needed at this time to expand the interest and participation in career education on a basis broad enough to permeate the entire school. He raised three pragmatic questions:

First, what is a suitable approach for integrating career education into the school? Second, and most crucial, how do we go about convincing educators (administrators and teachers) this is the direction in which they should move? Thirdly, how do we assist in preparing them to move in this direction?

Referring to the poverty of career developmental experiences for students at all levels, a number of educators have succinctly addressed the necessity of providing career education offerings

through classroom teachers. Drier (1972) was among the first to declare in-service preparation as the key to evolving effective career education delivery systems. He identified the priority task as helping teachers to develop the commitment and the skills and knowledge to plan and execute career education curriculum. He challenged in-service educators to identify possible methods by which the task could be achieved.

Keiser and Wampler (1974) focused their attention on educators' need to look for methods to eliminate the artificial barriers referred to by Marland. They advocated providing educators with a guidebook containing related activities and resources which could be easily integrated into their curriculum content.

The results of a comparative study of the integrated approach and the course approach led Webb (1975) to recommend that public school systems and teacher preparation institutions make a greater effort to incorporate "world of work" concepts into all phases of pre- and in-service teacher preparation. Her recommendation was based on the fact that the greatest percentage of problems discovered in any one category associated with implementation of either approach was the lack of skilled trainers and professionally trained personnel.

The most striking statement of justification came from Ryan (1974). He declared that ". . . if career education is to mature from its beginning, it is vital that future research and developmental efforts furnish guidelines to provide directions for teachers, counselors, and school administrators." He further added, "A contribution

of significance could be the publication of a guideline for in-service training that would provide consistency throughout a state or region."

The present study was a response to this need. It purported to develop a model framework for planning teacher in-service career education programs. Further support for this undertaking was found in the expressions of need for pre- and in-service teacher education programs that are beginning to permeate teacher education literature (Today's Education, January-February, 1975; Journal of Teacher Education, Vol. 24, Summer, 1974; Contemporary Issues in Education, 1975 Yearbook; American Vocational Journal, May, 1974; Peabody Journal of Education, October, 1974; Personnel and Guidance Journal, May, 1975; Journal of Career Education, Fall, 1974; and others).

STATEMENT OF THE PROBLEM

The ultimate goal of this study was to provide an in-service planning model by which classroom teachers could be prepared to select and utilize instructional materials and methods appropriate to the career developmental needs of middle school youth.

Five questions were structured to guide the development of the in-service model. They were as follows:

1. What are the distinguishable characteristics of career education in-service programs for teachers of middle school youth?
2. What core career developmental concepts are germane to teachers' understandings of the career developmental needs of middle school youth?

3. What are the elements of a model framework for planning teacher in-service programs in career education?

4. What are the components (goals, content, strategies, and alternative procedures) of a model framework that can easily be adopted to a variety of middle school teachers' in-service program needs?

5. What are the guidelines for selecting strategies essential to the effective utilization of community resources in career education in-service programs (i.e. parents, employers, advisory groups, civic and social organizations)?

BACKGROUND AND SIGNIFICANCE OF THE STUDY

This study focused on the in-service career education preparation of teachers of middle school youth for the following reasons. According to the findings of Gribbons and Lohnes (1968), McDaniels (1968), Super (1960), and Herr (1972), middle/junior high school youth are extremely needy and ready for assistance in preparing for adult roles. These youth are at a most crucial stage in their development. Assistance and decisions made at this time are directionally more important in determining developmental patterns than at any other period. Choices made and options exercised in undertaking their in and out of school learning and experiential activities-program have a far reaching impact on later education and employment opportunities. Consequently, if a single group of educators is to be singled out for

in-service career education preparation, teachers of middle school youth would be a most appropriate and logical choice. In addition, the findings of studies by Bailey and Stadt (1973) and Evans, Hoyt, and Mangum (1973) supported the claim that less attention has been given in the literature and research endeavor to the needs of middle and junior high school teachers and students than to those of teachers and students at other levels.

However, in response to the need for program materials to facilitate implementary career education program activities, commercial publishers, inventive educators, and free lance authors produced an abundance of career education materials. While most of these materials were rapidly produced, they filled the need for materials to move career education through the initial phases. Now that the career education concept is being pursued vigorously in every state the need exists for comprehensive materials for systematizing program development activities, in addition to that of gearing nationally produced materials to local program needs. Through in-service programs, teachers can be provided the theoretical understandings and skills needed to develop appropriate materials and to adapt existing published and unpublished materials to specific instructional and programatic needs. Therefore, the proposed in-service teacher career education preparatory model was considered to be a useful tool for preparing teachers to fill current and projected gaps in career education materials.

With the strong endorsement of career education at the federal level, the widespread acceptance of the concept, the proliferation of commercial and unpublished career education program materials, and the rapid development and continuing expansion of career education programs throughout the United States, it is inevitable that recognition of the need for preparing educators to implement the concept into the school curriculum would follow. Consequently, the National Institute of Education Staff (Wise, 1975), career education advocates (Hoyt and Woolard, 1973; Keller, 1972, 1974; Goldhammer, 1972; Gysbers, 1974; Baker, 1975), and the writer perceived the development of in-service career education programs to be a logical next step. According to Gysbers (1974), current pre-service preparation programs:

. . . are not yet providing sufficient educational experiences designed to prepare teachers, counselors and administrators to develop comprehensive career education programs. Neither are there preparation programs providing the level of assistance needed to improve and extend the career education competencies of existing school personnel. While many educators recognize this situation and are making substantial strides to overcome it, they are hampered by the lack of well established career education theory, methods and resources.

The literature showed little response to the situation described by Gysbers. Because few professionals, according to Drier (1972), have addressed the specific in-service career education needs of school teachers in a systematic and comprehensive manner, the construction of a model to prepare middle school teachers to blend career education into on-going instructional programs was undertaken. This study provided an in-service training model embracing

career education theory, methods, and resources for preparing educators in the delivery of career education at the classroom level.

From the materials presented thus far it can reasonably be concluded that problems of implementing career education into educational settings have witnessed substantial progress in passing through such general phases as: (1) developing conceptual bases, (2) providing the administrative structure and financing for implementation, (3) promoting attitudes which affect a supportive and facilitating climate, and (4) implementing numerous initial program activities (federally, state, and locally funded Exemplary Projects, system-wide efforts, and incidental school programs). Thus, leaving others in a possible five to seven phase problematic approach to fuller implementation to be realized. As previously stated, this study addresses the fifth of the possible phases, that is the development of the contemporary of key figures in the career education implementation processes--classroom teachers.

In summary, the undertaking of this proposed research and developmental study was further justified by its potential contribution to the following:

1. The pooling of the current repertoire of in-service career education program goals, elements, and teaching/learning strategies.
2. The provision of a useful tool by which individual teachers, schools, school systems, or professional organizations may design in-service programs which are appropriate to their needs.

3. The extending of the cumulative body of career education in-service teacher preparation research.

THE STUDY PROCEDURES

An overview of some of the activities which comprised the research and developmental aspects of the study follows:

1. The literature was reviewed to identify elements of substance from which the proposed theoretical framework could be ascertained.

2. Relevant sections of documents and program descriptions of selected funded career education programs were reviewed for program goals, content, resources, and operational procedures. These were identified, categorized, and synthesized.

3. Data obtained by the foregoing procedures was studied, analyzed, and synthesized to provide a base from which a draft of the proposed in-service education planning model was constructed.

4. The draft model was assessed by a group of educational practitioners selected by the directors of the five funded career education programs in Virginia.

5. Revision of the draft model on the basis of practitioners' input comprised the final step in actualizing the study objective: the development of a model framework by which middle and junior high school teachers could be assisted in developing competencies needed for blending career education instruction and experiences into the educational program.

ASSUMPTIONS

This study was based on the following assumptions:

1. It was necessary to develop new patterns of in-service training to articulate, install, manage, and support career education instruction in the schools.

2. The classroom was the most significant innovative unit in the school for implementing career education into the on-going curriculum.

3. Most teachers needed assistance in becoming active producers of new materials, teaching methods, and ideas for blending career education concepts into their subject matter areas.

4. It was possible to group ideas and knowledge within subject areas so as to provide career developmental emphasis.

5. The blending, infusion, or integration of career developmental experiences into existing curricula could be related to variety of career and curricular developmental theories and approaches. Thus, it can be said to have internal logic.

6. Freedom to experiment, to grapple with the principles of integration of concepts, should encourage innovations tailored to the needs of specific instructional groups and the conditions of individual schools.

7. In order to develop clearer understanding of their career developmental needs, students needed to have the assistance of more than one subject teacher or discipline.

DEFINITION OF TERMS

The following definitions of concepts and terminology used in the study were provided to clarify the sense in which the terms were used.

1. Career development--a term used to describe the accumulation of individual behavior related to work, both before and after entry into an occupation. . . . It is developmental, continuously interactive process which progresses from infancy throughout adulthood like an expanding spiral. In curricular terms, career education, primarily those related to self development; career planning, and decision making; and work attitudes, values, concepts and skills (Bailey and Stadt, 1973:347).

2. Model framework--a representation of the components of a process which describes relationships among components and illustrates a systematic approach to the process.

3. Vocational maturity--a term used to denote the degree of development, the place reached on the continuum of vocational development from exploration to decline. Vocational maturity may be thought of as vocational age, conceptually similar to mental age. . . . The place reached on the vocational development continuum may be described not only in terms of gross units which constitute the life stages but also in terms of much smaller and more refined units (Super, 1955:153).

4. Career education--refers to the total efforts of public education and the community aimed at helping all individuals to become familiar with the values of a work oriented society, to integrate these values into their personal value systems, and to implement these values into their lives in such a way that work becomes possible, meaningful, and satisfying to each individual (Hoyt, et al., 1972:1).

SCOPE AND LIMITATIONS

The parameters of this study were set by its pragmatic purpose: the providing of a model framework by which in-service career education programs could be planned for middle/junior high

school teachers. Because the model's elements and structural focuses were derived from theoretical career development propositions and sound in-service principles, they were considered generalizable to other career education purposes and levels.

The products (roadmaps, programs, workbooks, etc.) generated from use of the model developed in this study could be field tested by a variety of practitioners. The third boundary of the study was the pooling of data from which hypotheses can be drawn for further research.

ORGANIZATION OF THE PROPOSED STUDY

Chapter 1 will contain the background and description of the problem situation, a statement of the problem, purpose, need for the study, assumptions, limitations, research procedures, and definition of terms. Chapter 2 will consist of a review of literature relevant to career education, in-service, and instructional planning. Chapter 3 will present a detailed description and discussion of the research design, methodological procedures, data gathering instruments and strategies, and treatment and analysis of data. Chapter 4 will report the results and analysis of the study data and essential information relative to the development of the model. Chapter 5 will contain the summary, conclusions, observations, and recommendations.

Chapter 2

REVIEW OF RELATED LITERATURE

In this chapter the research literature directly related to the development of in-service programs in career education for middle school teachers will be presented. The materials selected for presentation will relate to the following topics: (1) emergence of the career education concept, (2) theoretical models of career development, (3) career education in middle/junior high schools, and (4) in-service career education programs.

EMERGENCE OF THE CAREER EDUCATION CONCEPT

Career education is a relatively new term. It is important, therefore, that guidelines for understanding the concept be presented at this venture in the literature review. Perhaps clarity for the term can be facilitated by reviewing the definitive assertions of James B. Allen, former Assistant Secretary for Education and U.S. Commissioner of Education; in addition to those of other career education advocates.

In a speech before the National Association of Secondary School principals in February, 1970, Allen may have coined the term career education. He outlined: (1) the current state of educational problems, (2) contemporary human condition, (3) the relationship of evidenced knowledge of career development and its relationship to

manpower, and (4) alienation in the work force. In this address he used the term career education in a cogent argument for: (1) increased support for vocational education, (2) renewed efforts to recast the entire educational system, and (3) developed programs serving and unifying individual and societal needs. He used the term career education in the following context:

It is the renewed awareness of the university of the basic human and social need for competence that is generating not only increased emphasis today on career education but a whole new concept of its character and its place in the total educational enterprise (1970:5).

Allen's successor, Sidney P. Marland (1971, 1972, 1973), made a more forceful plea and clearer commentary for acceptance of the career education theme introduced by Allen in a series of speeches, discussions, and articles (AASP, Houston, Texas, 1971; State Directors of Vocational Education, Ohio State University, 1972; Journal of Career Education, Fall, 1974).

In these addresses, Marland linked the effects of educational shortcomings, the need for continuing education of the underprivileged, the need for better education for youth, and the underemployment of females and the disadvantaged to fundamental career education concepts. In most of these addresses, the theme of his remarks appeared to be:

It is flatly necessary to begin to construct a sound, systematized relationship between education and work, a system which will make it standard practice to teach every student about occupations and the economic enterprise, a system that will markedly increase career options open to each individual and enable us to do a better job than we have been doing of meeting the manpower needs of the country.

Marland's remarks were reiterated by countless others in presentations to educators, members of Congress, state and local officials, and civic and industrial groups. Hence, according to Hoyt (1972) and Marland (1975), a national dialogue ensued in which a definition for the career education concept was sought. Many definitions have been proposed to explain the term's meaning and implications. However, no official definition of career education exists at the present time. Hoyt, Evans, Macklin, and Mangum (1972) proposed a definition, identifying the participants, goals, and objectives in career education. The writer feels that the career education concept can be best understood if its goals, participants, and objectives are clarified. Therefore, Hoyt, Evans, Macklin, and Mangum's (1972:1) explanation was selected to fulfill this purpose:

. . . the total effort of public education and the community aimed at helping all individuals to become familiar with the values of a work-oriented society, to integrate these values into their personal value systems, and to implement these values into their personal lives in such a way that work becomes possible, meaningful, and satisfying to each individual.

In the quest for definitions, career education concepts were incorporated into many presentations made by Robert M. Worthington (1972), Associate Commissioner for Adult, Vocational and Technical Education. He presented the substance of USOE's thinking in these words:

Career education is based on the idea that all educational experiences, curriculum, instruction, and counseling should be geared to preparing each individual for a life of economic

independence, personal fulfillment and an appreciation for the dignity of work. . . . It is similar to vocational education, but there is a fundamental distinction. For while vocational education is targeted at producing specific job skills at the high school level, career education embraces all occupations and professions and can include individuals of all ages whether in or out of school.

In 1971 Rumpf delivered a conference paper in which he presented six objectives of career education, five platform goals, and twelve characteristics for model career education programs. Rumpf presented these objectives, goals, and characteristics to challenge educational practitioners (i.e. administrators, classroom teachers, counselors, and ancillary personnel) to understand and accept changes that would be eminent in effecting models of career education delivery systems.

The development of conceptual career education program models to which Worthington and Rumpf referred was initiated by USOE in the 1971 and 1972 fiscal years.

During this period, USOE funded the development and teaching of four models for career education under the supervision of the career education task force. In addition to the models mentioned, several research and development (R & D) projects were implemented. The authorization, funding, and supervision of the models and the R & D projects represents USOE's initial efforts in developing and expanding the career education concept.

The description and objective of each of the four models are set forth in a USOE 1972 briefing paper. They are the: (1) school-based, (2) employer-based, (3) home/community-based, and (4) rural/residential-based models. The first of these, the school-based model,

is especially relevant for the purpose of this study. The conceptual framework for developing career education program models established by USOE contains objective and narrative descriptions for each of the four models. The objective of the school-based model follows:

To insure that students exit school with: a sense of purpose and direction, self identity and identification with society (and an idea of their relationship), basic skills and knowledge, a comprehensive awareness of career options and the ability to enter employment and/or further education.

Literature reviewed to this point emphasized: (1) the significant gap between recognized educational needs and provisions in the realm of occupational and personal development programs for school age youth, (2) which gave rise to the career education concept, (3) the concept's meaning and goals, and (4) USOE's effort to facilitate and implement the concept. In addition, attention was directed to the need for support in designing, implementing, and testing of programs to meet the career developmental needs of learners in a variety of educational settings.

Career education, as a viable educational concept, received the endorsement and support of the National Education Association at its 1974 annual convention. Resolutions regarding vocational and career education which were adopted by NEA at this meeting follows:

The National Education Association believes that preparation of children for careers, vocations, and productive jobs should be a basic policy of education. Educational programs should be developed for all children which will assure equal opportunity

for career and occupational development. A continuing program for training, retraining, advancement, and promotion should be provided to out-of-school youth and adults.

The Association will seek legislation to provide a comprehensive national manpower development policy, as the basic foundation for vocational and career education. It will also assist its affiliates in implementing similar programs and legislation.

The NEA's action was an example of similar steps that were taken by other national professional organizations. The AVA (1971) and AVA and NVGA (1973) established a significant program to: (1) define the concept and (2) develop legislative support and leadership for their new thrust in American education. Their program of actions focused upon: (1) promoting a national forum on career education, (2) providing professional leadership to enable affiliated organizations to sponsor similar forums, (3) preparing and disseminating publications and information on career education, (4) promoting a White House conference on career education, and (5) advocating the initiation of legislative effort to begin and to continue congressional support of the career education movement.

According to Evans and Lockwood (1974), other prestigious professional organizations such as the American Personnel and Guidance Association, the Modern Language Association, and the National Association of Secondary School Principals, and related groups have seen career education as a movement worth encouraging and have interacted with AVA and other associations to provide impetus through legislative and programmatic activities.

Bailey and Stadt (1973:276) paraphrased major points made by Hoyt (1971) in summarizing the professional attitude toward career

education. These points are that career education: (1) involves all teachers at all levels, (2) subsumes vocational education as an integral component, (3) must entail active involvement of the business-labor-industry community, (4) must provide active and continuing assistance to all persons, K throughout adulthood, and (5) must involve home and family in learning work attitudes and values. In addition, career education has witnessed expression of the continuing interest of business and industrial groups such as the National Chamber of Commerce, the Associated General Contractors, and the National Manufacturers Association. The concerted efforts of these educational, professional, business, and industrial groups to facilitate the enactment of appropriate legislation and substantial opportunities for career education led in part to the Congressional action which has exerted a significant impact on the current status of career education in the American scene.

The educational amendments of 1972 (P.L. 92-318) played a decisive role in determining the current status of career education. The NIE was established under this act to study: (1) the educational process, (2) career education and attending delivery systems, and (3) research and demonstrate career education delivery systems. The act also provided for an expanding definition of: (1) career education and (2) functional administrative roles in providing occupational education programs. Other relevant provisions of this act were:

1. The establishment of two divisions within the Department of Health, Education and Welfare to enhance educational and occupational programing for youth, adults, and professionals.

2. The extending of six sections of the 1968 amendment through June 30, 1975 to strengthen, expand and improve general vocational and career education in elementary, secondary, vocational schools, and community colleges.

3. The authorization of program implementation to serve the needs of special groups (i.e. disadvantaged, women, Indians, migratory workers and their dependents).

The authorization and appropriations stemming from the 1972 Act and its 1973, 1974, and 1975 amendments facilitated the implementation of exemplary and miscellaneous programs and projects at all educational levels.

Consequently, national and state educational agencies, public school systems, institutions of higher education, professional organizations, and publishing companies have become increasingly active in the promotion of career education through the sponsorship of publications, conferences and workshops, and programs. These indications of career education's increased popularity, as well as public, professional, and governmental support, of career education led Goldhammer (1972) and Gysbers, Mangum, and Moore (1974) to conclude that the task is now one of defining appropriate models and resources to implement career education in the schools.

According to Gysbers and Moore (1971:649), "the emerging convergence of career education purposes, materials and techniques suggest a need to organize programmatically around person-centered goals, based on career development and occupational theories." Current discussions of the theories to which Gysbers and Moore referred began to appear in the literature in the early 1950's. Consequently, their appearance antedates that of career education and provides some

perspective on which to focus career education and offer educators a variety of approaches to use in the development of career oriented programs.

At this point, attention will turn to a review and examination of the implications of these theories for in-service career education programs for middle school teachers.

THEORETICAL MODELS OF CAREER DEVELOPMENT

American education is based on the assumption, among others, that formal socialization (schooling) during the formative years of childhood and adolescence, prepares the young to assume a variety of career roles as adults. These assumptions were acknowledged in the preceding sections. On the basis of these assumptions, many career education authorities feel that career developmental theories represent models for the development of career education programs. Hence, teachers' understandings of career development theories is essential for expanding the role of career education in public schools. Therefore, without in-service training teachers who have not been provided orientation to theoretical career developmental models may find it difficult to create, select, and blend career education materials into the curriculum.

Hoppock (1967) states that explanation and discussion of selected theories will help teachers: (1) to see more clearly the

belief implied in their own behavior and (2) to question and modify many traditional practices and attitudes.

Crites (1969) claims that it is impossible to give a precise definition of what constitutes career development theory; he added, there seems however to be a universal agreement that all theories of career development and occupational choice have been formulated to explain how individuals choose occupations and why they select and eventually enter different occupations.

Zaccaria (1970) proclaimed that career developmental theory should assist and guide the educational practitioner in the following ways:

1. Tell the practitioner what to look for, what to expect, and where to go.
2. Lead to the observation of relationships which might have been previously overlooked.
3. Focus attention on relevant data by telling what to look for.
4. Help to construct new methods of behaving.
5. Aid in seeing sense and meaning in other people's behavior.
6. Lead to useful generalization.

At the turn of the present century, educators and humanitarian social workers began to express concern about the needs of human beings in relation to occupational roles. Frank Parson (1907)

responded to these expressions of societal and individual work needs by setting up a Vocational Bureau in Boston to provide a set of new services for relating people to jobs. Parsons employed a simple model for helping people. He utilized three approaches: (1) assistance in studying and understanding self, (2) assistance in obtaining information about jobs, and (3) assistance in engaging in true reasoning about the relationship of the facts obtained regarding self and occupations. Thus, was created the first theoretical model of career development.

According to Bailey (1971), this model became a framework for the development of: (1) other models for matching individual and jobs and (2) predictors of educational and vocational success.

Osipow (1972) pointed out that persistent effort has been directed toward the development of other approaches to understanding, explaining, and facilitating career development. He stated that at the present time the knowledge about career development and choice is primarily in the form of theoretical formulations and descriptions of the continuum in which the theories and determinators operate to influence development in the life stages.

Osipow (1968) proposed that theories of career development fall into four categories. These categories are as follows: (1) trait-factor, (2) sociological theories, (3) self-concept theories, and (4) personality-related theories. The first two of these focuses upon the psychological and sociological relationships between the individual

and his work. The last two deal with how people select, prepare for, enter, and advance in a career.

The theoretical formulations of Holland (1959), Roe (1957), Super (1957), and Williamson (1965) have been selected for analysis in this paper.

The selections of theoretical formulations from these works will be guided by their potentiality for meeting the career education needs of teacher education programs. Data for these descriptions will be drawn from sources cited earlier. Papers written by the theorist, appearing in Vocational Behavior: Readings in Theory and Research, Zytowski (1968), will serve as the primary source of interpolated material. According to Osipow, Holland's and Roe's theories appear to place emphasis upon Need theory, while Super's theory tends to emphasize the developmental aspects of the self concept, while Williamson emphasizes the conditions essential to optional human development as it relates to career choice and satisfactions.

There are three aspects of man's life stages that are of particular interest in this investigation. The first is the developmental processes by which an individual prepares for, enters, and assumes a place in the world of work. The second is the orientation and reorientation processes by which people revise, terminate, and reestablish work relationships in the economic world. The third is the adjustment processes by which an individual develops interests and skills in a vocational and leisure enterprise as a means of bringing greater satisfaction, balance, and substance to his life

roles. This interest will provide an additional problem through which the theories under scrutiny may be observed.

This review will present tenants of four career developmental theories which appear to have special relevance for teacher education-- a proposed model framework for preparing middle school teachers to blend career education into on-going instructional programs.

Holland's Theory of Vocational Choice

According to Holland, a person's vocational choice is based upon his "pattern of personal orientation" and is an expression of his personality. He utilizes a typology of six personality types-- realistic, intellectual, social, conventional, enterprising, and artistic--and six corresponding work environments to describe the choice phenomena. For Holland, these occupational classes designate types of people. He views occupational choice as a function of personality and assumes the preference of an occupation can be perceived as an index of personality and as an index of the environmental press.

Holland's descriptions of the choice process and the determinants of an occupational choice follows:

1. The person directs himself toward the major occupational class for which his development has impelled him by selecting the occupational class at the head of his particular hierarchy of classes.

2. Within a major class of occupations, the person's selection of an occupation is a function of his self-evaluation and his ability (intelligence) to perform adequately in his chosen environment.

3. Both of the preceding processes are mediated by a series of personal factors, including self-knowledge and evaluation, knowledge of occupational class, the orderliness of the developmental hierarchy, and a series of environments, social pressures from family and peers, evaluations of employers and potential employers, and limitations--imposed by socio-economic resources and the physical environment.

Holland identifies effects of the orientation heading the developmental hierarchy and the impact of subsequent orientations on the range of vocational choice in the following manner:

1. A well-defined hierarchy (one developmental pattern dominating all others) results in directional choice with minimal conflict or vacillation.

2. An ambiguous (two or more competing developmental patterns) results in vacillation in the direction of choice or no choice.

3. Blocking of the hierarchy choice by economic factors, employer evaluation (rejection), or any other factor in a well defined hierarchy results in the selection of the second developmental pattern if the second pattern dominates the third pattern. If the second and third patterns are of equal strength then vacillation in the direction of choice occurs.

4. Although persons with the same dominate adjustive pattern may head in the same direction, differences in the ordering of the

remaining patterns will result in difference in stability of choice; that is modal patterns will be associated with stability and atypical patterns with instability.

5. Modal patterning for a particular class of occupation makes for optimal functioning. (Useful index for modal patterning may be obtained from such interest inventories as the Strong and the Kuder.)

The impact of personal and occupational knowledge in career choice is explained by Holland in terms of facilitating and devaluating patterns. He presents the following conclusions:

1. Self knowledge operates to increase or decrease the accuracy with which a person makes a choice and refers to the amount of information the person possesses about himself. Over-evaluation leads to the selection of environments beyond the person's adaptive skills (unrealistic aspirations) and under-evaluation leads to the selection of environments below the person's skills.

2. A person's knowledge of occupational classes sets loose limits on his range of choice. A person's differentiation of the major classes and the specific occupations within classes also affect the accuracy with which he can make stable choices.

Ann Roe's Personality Theory of Career Choice

In her theoretical formulations, Roe accents the importance of genetic factors as these interact with need hierarchies to determine vocational behavior and choice. Osipow (1968) points out that this speculation can be broken down into three components. The first of

these proposes that there is a distinct relationship between an individual's early childhood experiences and his vocational choice. The second component, which is Maslow's personality theory, proposes that an individual's needs can be placed in a hierarchy of lower order needs (psychological and self-actualization). The third component is Roe's notion that there are genetic influences which effect vocational decisions and the development of need hierarchies.

According to the theory, the parents create a particular psychological climate by the manner in which they satisfy or frustrate the early needs of the child. As a result, a basic direction in attention is developed either toward persons or toward non-persons. This, in turn, results in predictable patterns of specific interests in the adult in terms of the fields to which he will apply himself. His vocation is one of these.

Super's Developmental Self-Concept Theory of Vocational Behavior

Within the context of a developmental frameowrk, Super proposed the notion that a person strives to implement his self-concept by choosing to enter the occupation he sees as most likely to permit his self-expression. Elaborating on this theme, Super proposed that: (1) any given individual possesses the potential for success and satisfaction in a variety of occupational settings, (2) vocational self-concept develops on the basis of children's observations and identification with adults involved in work, (3) a person's mode of adjustment at one period of his life is likely to be

predictive of his techniques of adjusting at a later period, and (4) work is a way of life and that adequate vocational and personal adjustment are more likely to result when both the nature of the work itself and the way of life that goes with it are congenial to the aptitudes, interests, and values of the person in question.

On the basis of the principles enumerated, Super (1953:185) generated through research ten propositions that lie within the context of a theory of vocational development. They are as follows:

1. People differ in their abilities, interests and personalities.
2. They are qualified, by virtue of these characteristics, for a number of occupations.
3. Each of these occupations requires a characteristic pattern of abilities, interests, and personality traits with tolerance wide enough, however, to allow both some variety of occupations for each individual and some variety of individuals in each occupation.
4. Vocational preferences and competencies, the situations in which people live and work, and hence their self concepts, change with time and experience (although self concepts are fairly stable from late adolescence until late maturity), making choices and adjustments a continuous process.
5. This process may be summed up in a series of life stages characterized as those of growth, exploration, establishment, maintenance, and decline, and these stages may be in turn subdivided into five stages--
 - A. Growth
 - B. Exploration
 1. fantasy
 2. tentative
 3. realistic
 - C. Establishment
 1. trial
 2. stable
 - D. Maintenance
 - E. Decline
6. The nature of the career pattern (that is, the occupational level attained and the sequence, frequency, and duration of trial and stable jobs) is determined by the individual's parental socio-economic level, mental ability, and personal characteristics, and the opportunities to which he is exposed.

7. Development through the life stages can be guided, partly by facilitating the process of maturation of abilities and interest and partly by aiding in reality testing and in the development of the self-concept.

8. The process of vocational development is essentially that of developing and implementing a self-concept: it is a compromise process in which self concept is a product of the interaction of inherited aptitudes, neural and endocrine make-up, opportunity to play various roles, and evaluations of the extent to which the results of role playing meet with the approval of superiors and fellows.

9. The process of compromise between individual and social factors, between self concept and reality, is one of role playing, whether the role is played in fantasy, in the counseling interview, or in real life activities such as school classes, clubs, part-time work, and entry jobs.

10. Work satisfaction and life satisfactions depend upon the extent to which the individual finds adequate outlets for his abilities, interests, personality traits and values; they depend upon his establishment in a type of work, a work situation, and way of life in which he can play the kind of role which his growth and exploratory experiences have led him to consider congenial and appropriate.

Williamson's Theoretical Perspectives
as Related to Human Development and
Career Education and Career Counseling

In order to fully grasp the many implications of vocational development and to place vocational counseling in a better perspective, Williamson found it necessary to trace the intellectual history preceeding the current forging of vocational development technology underlying the human condition. Consequently, within the perspectives of history, he reveals the philosophical and theoretical presuppositions underlying career development. His provocative explications, drawn from the upward-onward thrust in our evolutionary social order, have a direct bearing on the evolvment of a technology necessary in "helping persons to become their full potentiality." He denotes the role of education in preparing and placing trained manpower properly in work, as one of discovering the individual, respecting his rights of choice,

identifying and removing the forces that impedes individual freedom of choice in work and fulfillment of human potentiality to the ends, that the human potentialities of all members of American society may more fully be utilized both in the interest of each and in the interest of all.

A close analysis of Williamson's postulates and his book, Vocational Counseling (1965), in its entirety, led the writer to conclude that his is a significant contribution to the evolvement of a more complete theory of career development and occupational choice. His assumptions fit well into Osipow's (1968) trait-factor and sociological models.

Williamson proposes a dual role of education (counselors) in resolving the cultural paradox of freedom of choice and restriction of choice by working within the confines of educational and societal structures to broaden the range and variety of options open to those who have the requisite aptitudes and work interest.

The necessary assumptions and conditions for the emergence of the concept of work as fulfillment of potentiality, as set forth by Williamson (1965:28), has much to offer education. They are as follows:

1. Everyone possesses some kind and amount of potentiality that can be developed.
2. Education is the means of developing one's potentialities.
3. A wide range and diversity of work opportunity must be made available.
4. The psychological and societal dynamism necessary to create and exploit favorable economic and mercantile conditions must be present.
5. Dependable and valid means and techniques of identification of potentialities must be made available.
6. An 'open' society must have emerged, in which talent is where you find it.

In tracing the formulation of concepts unique to discovering the individual, in relationship to his career selection problems, Williamson summarizes the emerging concepts of psychological analysis of individual students' capabilities prior to class instruction and to counseling about a life's work and a career. He recognized the development of emerging strategies and scientifically derived methods of identifying human capabilities and their contributions in the identification of some of the trajectory dimensions of career development and counseling. Thusly, he set forth the concept of trait-factor analysis and its implication for human development and career education, referred to by Osipow (1968).

Career development is premised upon the concept of life development as an inter-to-outer unfolding of potentialities. This assumption would assign education the role of helping students to identify that which is "there" in miniature and to aid the student or "settle" himself in a related trajectory path preparatory to the "unfolding" of the indicated developmental curve.

A careful study of the four career development theories reviewed leads to the conclusion that career developmental concepts can provide the theoretical underpinnings by which a model framework can be constructed for preparing middle school teachers to blend career education into the curriculum.

Ultimately, career development theory can become the lens in the "career education telescope" through which educators identify

salient elements in the curriculum which have direct influence on self development through education, work, and leisure.

Summary and Synthesis

The theoretical models of career development presented here are assumed to represent the most common explanations of growing up in American society. They are described in terms of orientation and feature clusters of behavior patterns commonly used by human beings to cope with developmental problems involving: psychological needs, self concept, motives, vocational and educational goals, preferred occupational-life-style, attitudes and abilities, as well as, the social, economic, and physical determinants of life roles.

The more popular theories in each of the theoretical models, trait factor, sociological, developmental, and personality were presented individually. Because the theories displayed major similarities, and emphasized the same kinds of critical determinants and periods, little attempt was made to compare or contrast them. The theories presented in each of the modal groupings, contain similar elements. A description of the modal groupings which follows will focus upon their primary orientation. The major differences between the theoretical orientation embracing the models are of emphases.

Brief descriptions of the categorical explanations of career development and choic theory presented in this study follow:

The trait factor theory attempted a matching of the individual's characteristics with occupational opportunities. The sociological theories focused on the development of techniques to cope with

environmental factors which affect choice. The developmental theories included the approach of comparing an individual's self concept to his concept of the occupational world, which was similar to the trait factor. This approach differed from the trait factor approach, in that it featured choice as a developmental process extending throughout a life time, rather than a point-in-time behavior. The personality theories expressed a point of view which differs from the explanations featured in the other three approaches. In the personality theories, career choice is viewed as the development of a need-satisfaction pattern through a series of choices. The individual's perception of his needs and of the need satisfying potentials of certain occupations, and his opportunities for entry and success, ultimately influence his choice. The occupational choice, job preparation, and entry behavior are viewed as expressions of the individual's personality.

The theoretical models reviewed have shown occupational choice to be a unifying theoretical concept, although viewed from different theoretical approaches. Each approach proposed that individual attributes and occupational influences are joined through the action of choice, culminating in the individual's occupational career. The satisfaction determinates were shown to play a leading role in determining the satisfaction resulting from choice.

It appears that the attributes of the individual and the influences of occupations are the most important factors in the choice process and that the individual must accomplish the process of choosing

(Hoppock, 1967). Therefore, it is of utmost importance that the individuals be provided the understandings and skills with which to accomplish the process. This means that during the developmental stages children and youth must be provided strategies for correctly appraising personality characteristics and the occupational opportunities available to them. In addition, ways must be found to assist youngsters in using these understandings in selecting and engaging in a variety of career-role-developmental experiences. Therefore, it is conceivable that the classroom teacher's role correspondingly becomes that of resource person, a dispenser of occupational-educational information, and facilitator of career developmental behavior.

CAREER EDUCATION IN MIDDLE/JUNIOR HIGH SCHOOLS

From "theory to practice" describes the intent of this section of the literature review. Material enumerating and illustrating ways in which the implications of (1) theoretical models of career development and (2) principles, features, and suggestions for career education practices can be utilized to develop a career relevant middle/junior high school curriculum will be presented.

Career Relevant Curriculum For Middle Schools

Career relevant curricular for middle/junior high school youth has claimed the attention of writers for a number of years (Peters and Farewell, 1959; Caplan, Ruble, and Segel, 1963; Super, 1960; Gibbons

and Lohnes, 1968; Norwich, 1971; Webb, 1975; Ressler, 1973; Evans, Hoyt, and Mangum, 1973). These writers have proposed a variety of career development activities as solutions to the vocational development problems of students in grade levels K through nine, age range twelve through sixteen. Their research findings indicate that all teachers in these grade levels should be involved in the development of a career relevant school curriculum.

Ashcraft (1966) stated that the career relevant curriculum includes any curriculum which in some way attempts to relate the nature of the information being learned to either the present or future vocational life of the student.

The findings of two especially pertinent longitudinal studies related to career development of persons beginning in the middle school years (Super and others, 1957, 1960; Gibbons and Lohnes, 1968) suggest that: "Vocational development and career planning are valid and inescapable concerns of youth, and have not been effectively incorporated within the middle school curriculum." Findings reported by other researchers indicate that some teachers are aware of this discrepancy and desire assistance in developing rectifying strategies. Peters and Farewell (1959:99-101) reported a study where in junior high school teachers revealed that:

1. Students seemed to follow their parents' wishes with respect to their vocational plans, rather than thinking independently for themselves.
2. As teachers, they had little other than accidental kinds of activities that they could specifically recount and in which they could incorporate career implications of their subject matter into their teaching.

3. The teachers enthusiastically supported a proposal that someone help them integrate career implications of their subject matter into their regular instructional materials.

Many articles, books, and suggestions have been prepared to help teachers who want to become involved in career development activities (Campbell, Waltz, Miller, and Kringer, 1973; Drier, 1973; Bottoms and Cleere, 1969; Stevenson, 1973; Leonard, 1969).

Schere and Clary (1973) point out that:

The career education-oriented curriculum can serve instructive, motivative, and adjustive functions for students in the middle grades: the instructive uses are to teach the student something about those occupations related to the subject material being discussed; the adjustive function is to assist a student in developing an appropriate balance between self and career aspirations: the career-oriented curriculum can be designed to arouse, stimulate, and encourage students to begin career planning.

A number of other writers have discussed the major goals which are appropriate for middle/junior high school career guidance programs (Hudak, 1967; Oklahoma State Department of Education, 1968; Albracht, 1968; Bottoms and Cleere, 1969). The general nature of the goals spelled out by these authorities parallel the basic needs of middle/junior high school youth. They are based on: (1) the characteristics of youth who are beginning to realistically explore the relationship between their characteristics, (2) strategies for relating categories of occupational types to learning the processes involved in planning and implementing occupational choices, and (3) steps involved in helping youth to develop goals and tentative plans for their future.

Bottoms and Cleere (1969) reported an extensive model featuring six elements: (1) self and relationships with others, (2) the world of

work, (3) education and training, (4) economic education, (5) employability skills, and (6) decision-making process. They pointed out that based on their model framework, junior high school career guidance programs would be:

. . . designed to provide linkage between the elementary school, where students explore themselves and the occupational world in terms of their immediate environment and broaden perceptions about occupational possibilities, and the high school, where students need to narrow and tentatively select vocational and educational directions.

In addition, Bottoms and Cleere presented three specific goals which are included in several articles and in a text written by Hansen (1972) which contains twelve strategies for development program from Kindergarten through grade twelve. These strategies presented by Hansen are fully consistent with Super's general orientation described in the section on review of theoretical models of career development in this chapter.

Hansen's strategies number 2, 3, and 8 promoted the recommendation made by Gibbons and Lohnes in their 1968 career pattern studies report. These three strategies proposed by Hansen involve career development activities at the middle/junior high school level and are especially relevant to the goals of this study. It is, therefore, important that they be reviewed. Her strategy 2 suggested:

1. Recognition of personal strengths, emerging values, and goals.
2. Awareness of individual potential.
3. Awareness of the influence of others on the student's emerging goals.
4. Awareness of emerging personal styles for the student.
5. Exploration of the worlds of education, occupations, and work, with an overriding emphasis on an activity-oriented program.

And in addition, Hansen proposed specific activities for conducting occupational-activity-oriented programs. Included in the activities proposed are: (1) strength groups, (2) career resources utilization, (3) emphasis on broadening career role models, and (4) tentative career hypothesis.

Her strategy 3 enhanced:

1. Teaching decision-making skills
2. Providing work simulation experiences.
3. Teaching manpower and economic trends.
4. Encouraging career development 'contracts' in which students make definite career (not occupational) development plans.

Hansen's strategy 8 'Career Development Subject Teams' is recommended for the junior and senior high school level. In implementing the strategy, schools are urged to identify ways in which school subjects could be related more closely to careers and to the world of work. Here, Hansen proposes that teams consisting of a teacher from a given subject area, a counselor, a community volunteer, a parent, a worker in a field related to the subject matter area, and two or more students come together to attack the problem. For those school systems where teachers are wondering how they can possibly become acquainted with the career implications of their subject matter, this suggestion by Hansen may prove both practical and helpful.

Concerns In Designing Career Relevant Approaches

Many of the goals and models considered important for the development and utilization of career education methods for middle/junior high school instructional programs have been used to develop specific types of methodology to meet the diverse needs of individuals in this student population group. It is important that educators remember that students in this population group will be found to be

functioning at the various levels of needs and stages of development as described by Overby, Kinghorn, and Preston (1972). Consequently, as Bottoms and Cleere (1969) suggest, consideration should be given to selecting and utilizing instructive procedures in terms of their abstractiveness or concreteness. They suggest an abstract-concrete continuum which includes levels listed from the most abstract to the most concrete.

Many middle and junior high school educators have looked for ways to translate these goals, models, and suggestions into specific approaches for implementing relevant career education curriculum. Campbell, Waltz, Miller, and Kriger (1973) listed ten examples of high quality approaches. The approaches can be used widely by a number of schools either because expensive equipment and resources are not required or because schools have already completed the expensive developmental work and are willing to share materials with other schools. They are:

1. Career information systems.
2. Development programs.
3. Involving parents in career development.
4. Manpower and economic education.
5. Mobile career guidance services.
6. Special curricular to motivate career exploration.
7. Teaching decision making.
8. Using models to learn vocational behaviors.
9. Using simulation to facilitate vocational exploration and decision making.
10. Vocational exploration through media and classroom activities.

A number of the foregoing approaches have been used by educators to develop career education programs. Examples of exemplary projects (federally funded) and the efforts of state departments of instruction

and public school systems, illustrating the application of these approaches will be reviewed.

Examples of Exemplary Projects

Exemplary projects such as ABLE, BEACON, EDUCAST, SUTOE, and CEM utilized a variety of delivery systems to provide assistance to middle/junior high school teachers and students in studying the various aspects of occupational information, career planning, and relating these data to future educational-occupational planning. An overview of some of the salient features of these projects follows.

Project ABLE (Wenrich, 1971), produced by the Division of Vocational Education, Northern Illinois University, has developed a real life drama. The drama provides real life experiences depicting the fundamental human activities of adults and children in a variety of career developmental settings over a period of years. This drama enables teachers and students to focus on "The Biographical Information System." This system is an instrument for guiding career development in terms of: (1) helping the teacher plan an appropriate program of studies for each child, (2) aiding each child in creating a healthy self-image, and (3) assisting counselors, pupils and parents with realistic career development goals.

The spectacular role of the teacher in career education emerges in the skit entitled "Premiere Performance." The outstanding performance suggested are:

1. Teachers can increase the utilization of educational resources by arranging for direct exchange between adults and students.

2. Teachers can improve their instruction of basic skills by employing a person in the occupation as an organizing center for planning.

3. Teachers can arrange a more significant base for sensory experiencing by facilitating the sharing of visual and oral accomplishments in a variety of school settings.

4. Teachers can develop personal meanings of students by incorporating the teaching of inquiry and value clarification skills within their regular program of studies.

5. Teachers can create more life-centered activities for individual students by learning about their interests, abilities, and previous educational experiences, and then forming efforts upon career development goals.

BEACON (Stiller, 1968) is a developmental guidance-oriented program accomplished almost exclusively through the elementary school classroom. The project focuses on building a program to meet the needs of pupils of low socioeconomic backgrounds. One of the specific goals is to improve and raise educational levels. Each teacher in the project's four target schools incorporates into her classroom a variety of activities under each of the BEACON goal areas. A resource teacher has been assigned to each school, along with special service personnel, and released time for in-service teachers has been an important part of the project. Multi-ethnic materials have been widely used, particularly materials on Negro history. The fundamental goal of Project BEACON has been the stimulation of academic achievement of children by providing the necessary conditions, methods, and materials to help build a better self-concept. In this sense it is integrally related to the goals of career guidance.

WOW (EDUCAST, 1968), known as the "World of Work" series, is a commercially produced series of materials intended for use from grades kindergarten to nine. It is presented as an answer to many of

the deficiencies in the preparation of students for entry into the world of work. The materials include films and records on the "Wonderful World of Work." The four to six grade sequence presents "What Else Do Fathers Do?" and "The World Around Us," with the concept of occupational clusters. The program for grades seven to nine, "A Mountain Worth Climbing," focuses on staying in school, with thumbnail occupational clusters. The emphasis throughout is on vocational orientation and vocational awareness. It is intended as a supplement to the social studies curriculum, or as part of the elementary and early secondary curriculum, depending on the particular organization of each school.

Project SUTOE (Capsule, 1969) is a teacher's guide to self understanding through occupational exploration and was developed by Oregon State Department of Education for use in a one year course "Self Understanding Through Occupational Exploration" and is designed for ninth graders. SUTOE aims at linking together the efforts of the vocational education programs, general education programs, and guidance programs in order to enable the student to take better advantage of available opportunities through which he may ascertain, and succeed in reaching, his occupational niche.

Project CEM (Weinfordner, 1968) is a program model for career exploration in the junior high school, developed at a conference organized for that purpose in West Georgia College in Carrollton. The approach suggested in this model is one which involves teachers and counselors and is integrated into the curriculum in a kindergarten through twelve program.

The model suggests knowledge objectives and related behavioral outcomes for each of the three grade levels in six career development components. In the model, sample activities are listed to promote the achievement of each knowledge objective, and certain grade levels are recommended for special emphasis. The model also suggests means of implementation, including soliciting administrative support, staff involvement, and open lines of communication, and building appropriate evaluation procedures into the program at the outset.

Examples of State and Local Programs

Semester or full academic year courses called "introduction to vocations" (or some similar title) have been taught for several years now at the junior high school level. This practice appears to be particularly common in New Jersey and North Carolina, where state departments of education have made curriculum guides for use in such classes. For some time career exploration programs utilizing integrated and separated course approaches have been developing across the land.

It appears that the trend in career exploration program development is toward integration of career exploration activities, materials, and methods into every classroom. Less emphasis was placed on the separate classroom approach in the reports of current practices appearing in the literature (Webb, 1975; Evans, Hoyt, and Mangum, 1973). Therefore, attention will be given to a review of selected local programs illustrating a variety of motivations, orientations, and procedures.

A 1967 publication of the Texas Education Agency describes a "careers of the month" program carried out at Mann Junior High School, Abilene. During the initial year of implementation, each month of the school year, one or more disciplines were picked as those that would emphasize career implications of their subject matter during that month. When faced with the call for use of outside resource persons, field trips, and a wide variety of similar kinds of student activities, the school counselor, by concentrating on only a few of the disciplines each month, was able to provide concrete assistance to teachers in ways that would not be possible were he to try to serve all teachers throughout the entire school year. By beginning this way, teachers in Mann Junior High have felt less need for consultative assistance. In subsequent years, the program evolved into a kind of continuing infusion into all subject matter areas that hopefully would lead to an ideal career education program.

In the Apex school system, Wake County, North Carolina, career education in the middle school grades (five through eight) are coordinated by a counselor-coordinator. An interim report of this project covering the period January to March, 1973, provides several examples of career development/career education activities that resulted in: (1) mini-courses for the dental hygienist and secretarial-receptionist areas to fifth graders; (2) projects cutting across several subject matter areas for eighth graders, including a communications system with module telegraph poles and building an electric map of the United

States; and (3) exploratory courses for eighth graders in the construction trades and health occupations, and a modern sewing class.

At School No. 72 in Baltimore (Pinson, 1974) a special kind of career education effort was launched for twenty-one boys and girls escribed as "high risk potential dropouts." This was used to describe a small minority of students found in most junior high schools who are over-age for their grade, whose level of achievement is far below that of their classmates, and who apparently are just waiting for the time when they can drop out of school. A career development approach, built around work experience, was taken with these students. Part-time paid jobs were found for them in the afternoon, and a special teacher was assigned to teach them basic subject matter in the mornings.

Teachers in the Lawrence Cook Junior High School, Santa Rosa, California (Evans, et al., 1973), used the services of paraprofessionals called "career education specialists" to contact community workers willing to come to class and discuss the kinds of life-styles they were leading in their work. Thus, community representatives were used to relate careers in his or her industry to a number of subject matter areas through discussing their life-style and those seen in their customers. The important points to be observed here are: (1) contacts with industry representatives were made, typically, through assistance of a paraprofessional from the career guidance center and (2) visitations concentrated on careers and life-styles rather than the details of specific occupations. By careful planning, teachers

were able to construct career education learning experiences, having direct relationships to their specific subject matter areas, which cut across subject matter areas.

In Perry Hall Junior High School, Maryland (Pinson, 1972), a special career education effort has been launched for students who, during the seventh and eighth grades, were underachievers and exhibited disciplinary or attendance problems. For these students, a career development team of teachers is used. This team has sufficient members so that the teacher-pupil ratio is lower than for other parts of the school. Team members work together in planning a number of joint activity projects that cut across subject matter lines and involve a great deal of cooperative planning and action on the part of all members of the teaching team. The program was reported as working well in terms of both student satisfaction and improved student academic performance, motivation, and school attendance.

Summary Content

According to the research presented here, flexibility, freedom, and individuality have been the key elements of current efforts to blend career education into school curricular. The examples of exemplary projects and other programs presented were intended to be illustrative rather than exhaustive. The comments and discussions regarding the activities were intended to: (1) make a strong case for the capability of career education in traditional settings; (2) suggest that teachers, counselors, and administrators can deal with the "here and now" as well as future career developmental needs of youth;

and (3) speculate on steps that can be taken to ensure the development of systematically planned career education in-service preparatory programs for educational practitioners, with special reference to middle school teachers.

A number of salient features of current career education programs and suggestions for program development found in the literature support the construction of a model framework for preparing middle school teachers to blend career education into the instructional content. These observations include descriptions of organizational procedures, need specification strategies, determining categories of goals, structural design and flexible scheduling, content, teaching/learning strategies, and follow-up and evaluation.

Implications drawn from an analysis of these data elements set forth some of the essential components to be considered in determining descriptive categories of the model framework.

IN-SERVICE CAREER EDUCATION PROGRAMS

As stated in the foregoing section, the topic discussed in this section will deal primarily with: (1) the state of career education in-service programs; (2) suggestions for providing, extending, and improving in-service career education programs; and (3) the context of current career education in-service programs.

The Current State of In-Service Career Education Programs

According to a number of authorities, in-service education programs for classroom teachers have not kept pace with apparent

needs (Keller, 1974; Ryan, 1974; Goldhammer, 1972; Bailey, 1973; Gysbers, Magnuson, and Moore, 1974). Consequently, in spite of the wide acclaim, acceptance, and support accorded the career education concept, few reports of in-service practice and research findings are found in the literature.

Describing the current state of career education in-service provisions, Gysbers, Magnuson, and Moore (1974) stated:

. . . At the present time, however, most teacher, counselor and administrator preparation programs are not yet providing sufficient educational experiences designed to prepare prospective teachers, counselors and administrators to develop comprehensive Career Education programs. Neither are these preparation programs providing the levels of assistance needed to improve and extend the Career Education competencies of existing school personnel. While many educators recognize this situation and are making substantial strides to overcome it, they are hampered by the lack of well established Career Education theory, methods and resources.

A few educators have responded to the full range of career education preparation needs. Their response has taken the form of preparing conference papers and addresses dealing with in-service program development (Keller, 1974; Goldhammer, 1972; Marland, 1974; Hoyt, 1974). Several writers have prepared guidelines to assist career education program planners in the development of in-service components of exemplary projects, as well as programs developed under the auspices of state and local educational agencies (Bailey, 1973; Keller, 1972; Ressler, 1973; Hoyt, Evans, and Macklin, 1974; Mangun, 1974; Gysbers, Magnuson, and Moore, 1974). While still others have attempted to identify needs which have become evident in the development and execution of exemplary, state, and local school projects (Hansen, 1970; Ressler, 1973; Keller, 1974).

Keller (1974) compiled a list of skills needed by all educators to accommodate career education. Many of the items on the list were identified by directors of career education programs as barriers to full implementation.

Evans and Lockwood (1974:13) perceived the key issue in teachers' preparation for career education as, "Who shall assume the ultimate responsibility?" According to them, the primary route of support, interest, and attempts to broaden in-service preparation for career education has come from Local Educational Agency (LEA) staffs, counselor education, and vocational education. They attribute the limited in-service attempts to an initial belief that: (1) career education and vocational education were unproven and (2) the primary responsibility for preparing career education programs for students and teachers was in the domain of counselor and vocational education respectively.

Kenneth Hoyt's (1972, 1973, 1974) comments for career education did much to dispel these misconceptions. In a series of addresses and articles he featured in-service career education as embracing elements of: (1) awareness, (2) explanation, (3) preparation, and (4) implementation.

Suggestions for Providing In-Service Career Education Programs

Ressler (1973) approached the question of teacher in-service career education preparation from a prerequisite desire to change viewpoints. He pointed out that willingness to change must be based on four assurances given primarily to classroom teachers, although administrators

will need these assurances in different degrees. It appears that Ressler's argument for successful in-service is based on positive teacher attitudes and belief in the community and in compatibility of career development instructional program goals. It can be reasonably concluded that, endowed with a productive attitude, many teachers can embark on self-prescribed career education competency development projects.

NIE's Career Education Task Force (1973) has provided some strategies to guide LEAs in installing school-based career education programs. The strategies are comprehensive and cover developing, initiating, and conducting of activities to infuse career education into ongoing school programs. The twelve strategies were presented with illustrations to provide answers to such questions as: (1) What specifically must we do to get a program going, (2) How do we secure community support for our efforts, (3) How do we get the staff involved, (4) How can parents help, and (5) What should in-service for teachers of school youth include?

Gysbers and Moore (1971) suggested a content and activity emphasis in career development programs. Translated into an in-service framework for middle school teachers, the program suggested by Gysbers and Moore would feature the types of learning, content, and activities shown in Figure 1.

It is apparent from an analysis of Figure 1 and the foregoing discussions that middle school teacher in-service activities should include demonstrations of teaching/learning strategies designed to

GRADES	TYPES OF LEARNING	SELECTED EXAMPLES OF CONTENT	SELECTED EXAMPLES OF ACTIVITIES
K	P E R C E P T U A L	Whom am I?	Listening
1		How do I relate to my environment?	Observing
2		Workers in the home and school Workers in the community	Contrasting Differentiating Manipulating Field Trips Worker Role Models
3	C O N C E P T U A L G E N E R A L I Z A T I O N	Continuation of exploring self in regard to work and education world	Field Trips Demonstrations Work Simulation Role Playing
4		Wider range of occupations examined	
5		Work takes on additional meanings	
6			
7		Purposes of education	Simulation
8		Study of occupations	Try-out
9	Career decision-making processes	Work Simulation Exploratory Work Experiences	
		Utilization of actual work world data	Cooperative Work Experiences
		Relate work to life style	Occupational Visits Computerized
		Employability skill training	Guidance Systems
		Educational orientation	Occupational Clubs

Figure 1

Suggested Content and Activity Emphases In
Career Development Programs

Source:

N. Gysbers and E. J. Moore, "Career Development in the Schools" in G. Laws (Ed.) Contemporary Concepts in Vocational Education. First Yearbook of the American Vocational Association, 1971.

assist twelve to fourteen year old adolescents differentiate with clear perspective choices relevant to work, study, and play. In this sense, career education in-service becomes a vehicle to help youth in their exploration of such questions as "Who am I?" and "Where am I going?" and "How can I get there?"

Two relevant articles describing proposed in-service programs for educational practitioners appeared in the Fall, 1974 issue of the Journal of Career Education. In the first one, Gysbers (1974) stated that:

Teacher, counselor and administrator preparation programs must integrate Career Education concepts and methods into their respective pre- and in-service curricular to support and reinforce the substantial progress that has taken place at State and local levels. Although training programs will respond to this need differently, there are some basic components which form basis for pre- and in-service career education curriculum integration. These components are: (1) a conceptual model that encompasses the goals of Career Education, (2) exemplary packaging of Career Education content (modules), and (3) a methods and process guide.

In addition, the integration of Career Education content and methods into pre- and in-service preparation programs must be specific and practical but at the same time be open ended and adaptable to accommodate special program needs and to stimulate individual innovation.

Keller included in her article a comprehensive list of suggestions for developing internal career education in-service programs at the college level. Because of the generalization ability of the ideas to all educational levels, the list is considered significant.

Principles and Concepts for
Successful In-Service Career
Education Programs

During the last decade substantial effort has been exerted to effect varying facets of student learnings via in-service teacher

education. An interesting idea drawn from a survey of teachers' perceived in-service needs has been reported by Cain (1973). He stated that:

In the NFER Survey, 75% or more of the teachers said that they would like to pair working groups of teachers with the definite objective of exploring subjects or topics in terms of classroom teaching, and which involved participants in practice trials and experimentations with methods, materials and ideas. Almost as many indicated that they would like opportunity to observe and discuss demonstrations of lessons or teaching activities by other teachers, preferably with classes similar to their own.

In an article entitled "Meeting Teachers' Needs" the author, Cane (1971), made the following statement:

Assuming convenient circumstances, and by this I mean, I think, no expense involved, part-time rather than full-time courses, and generally, but not always, school time rather than own time, and location within easy travel distance (i.e., five to ten miles) teacher will generally support in-service education activities.

The findings of a survey reported by Watkins (1973) provides evidence that given convenient circumstances, teachers will support in-service education which has a strong and relevant classroom orientation.

According to Baer and Roeber (1964), curricular supporting individuals searching for vocational identity have a classroom relevant orientation. They perceived the developments of such curriculum as:

. . . a selective perception process, by which teachers select and give attention to student experiences, which are considered to be the most important part of the rationale for developing an integrated individual, and a goal centered curriculum.

They concluded that "to prepare teachers to do otherwise is a waste of students' and teachers' time."

In a similar vein, Tiedeman (1971) discussed pertinent aspects of preparing teachers to develop: (1) relevant classroom activities and (2) to perfect their skills in providing students opportunities to integrate data pertaining to self opportunities, potentials, and subject content. He presented a list of perspectives for effecting more humanistic professional attitudes and classroom practice in the schools; in addition to providing relevant curricular offerings for a large number of students.

Substantial support has been found in the literature for preparing teachers to become efficient users of curriculum blending approaches. Consequently, the rationale, the merits, the obstacles, the rewards, and the strategies associated with the infused/articulated/core or integrated approach should be considered important aspects of teacher in-service preparation programs (Baer and Roeber, 1964; Tiedeman, 1971; Hansen, 1972; Evans, Hoyt, and Mangum, 1972; Bailey and Stadt, 1973; Swanson and Jervis, 1973).

The theoretical implication of the integrated/articulated or blended curriculum approach was succinctly depicted by Taylor (1969) in "Students Without Teachers." He wrote:

What is meant by a theory which says education must be built around the student, and that the student must be involved in planning it, and doing it, is that knowledge is not a thing but a psychic state. Until the one who seeks it acts within his own consciousness and makes an idea or a fact or an experience part of his own psychic development, he has not gained knowledge.

Taylor's statement provides guidance in the development of an in-service philosophy and in the selection of teaching/learning strategies for teachers' in-service career education preparation programs.

The philosophies, rationale, and strategies for in-service education advocated by Harris and Bessent (1968) are supported in the works of Swanson and Jervis (1973). In a publication entitled "Professional Development," they followed the concepts of in-service established by a number of authors (Watkins, 1973; Shipman, 1974; Verduin, 1967; Kemp, 1971).

It appears that the principles and practices advocated in the literature can be used to establish a variety of career education in-service programs involving the total professional staff.

Examples of Career Education In-Service Programs

A few institutions have reported their attempts to develop career education in-service programs. The reports represent major large cities' programs with federal funding and local funding, while others are attempts within individual schools to improve guidance services to students via in-service preparation of teachers. It should be pointed out that few of the programs are planned to provide systematic, continuous preparation for over a long time span (academic school year). A review of some of these programs will be presented.

The literature search revealed that local and state educational agencies have sponsored a number of relevant in-service career education programs. These programs tended to focus on the development of career education curriculum materials and/or the development of specific career development competencies, understandings, and states (North Carolina State Department of Public Instruction, 1965; Indiana University, 1967;

Cleveland Public Schools, 1968; Tennyson and Klaurens, 1968; Los Angeles Public Schools, 1968; District of Columbia Schools, 1975).

Most of these in-service projects were of the workshop type and were conducted during summer months. The one exception was an October to May nine session ESEA educational program sponsored by the Los Angeles school system. The duration of other programs reported tended to cover periods of one, two, three, four, or five week summer sessions, with provision for follow-up contacts with participants during the school year. Faculty in the participant schools where the workshop learnings were to be operationalized were oriented to the program's goals, activities, and services during pre-school workshops and students during assembly programs at the beginning of the school year.

The instructional procedures involved instructional plans, mini courses, field trips to business and industry, independent study, group and individual projects, informal and formal discussions dealing with theoretical and practical experiences. Among the other types of learning activities utilized were planning by teams for program implementation, follow-up, and evaluation in participant schools; work practicum experience such as utilizing the Dictionary of Occupational Titles; writing teacher guides; conducting small group sessions; setting up a resume file; and constructing counseling and teaching aides. In addition, lecturers prominent in career guidance and counseling were used as speakers and as consultants in group and in individual settings.

The overviews prepared for some of the workshops and the materials designed were sufficiently well developed to serve as textbooks or guidelines for developing supplementary text materials.

Integration of Career Education
into the Curriculum

In-service career education programs to prepare teachers to utilize integrated curriculum approaches received little attention in the literature. This may be due in part to the difficulty experienced by many teachers and career education program administrators in finding a practical method for refining career education concepts and objectives into an already existing program. According to Webb (1975: 35), 59 percent of the program administrators in a formal state poll (North Carolina, Virginia, Maryland, and Tennessee) rated this as an extremely important problem. Other problem areas of probable significance ranked as extremely important by these administrators are: (1) lack of guides in academic areas which integrate career exploration (50 percent), (2) personnel securing retraining, the commitment and involvement of the individual classroom teacher (62 percent), (3) pre-service or in-service time to allow classroom teachers to understand objectives (70 percent), and (4) other areas rated at the 50 percent level of extreme importance were attitudes, teachers' resistance to change, "funding for teacher's in-service training" and "for persons responsible for promoting and assisting teachers in using the integrated approach."

Two successful pilot career development projects for middle school pupils and their teachers utilizing the integrated approach were reported by Paulson and Gordon (1967) and Pinson (1971, 1972, 1973) respectively. These programs were conducted in Chicago and Montgomery County, Maryland. The programs' major intents were: "(1) to acquaint

teachers with ways career development could be incorporated into the curriculum and (2) to facilitate student career development."

The in-service programs's goals, structure, and methods of both projects were similar. The Maryland project extended the work value content to include hands-on-activities and the initiation of community action programs based on an environmental career-clusters-approach.

In-Service Programs for Specialized Personnel

In-service activities and staff development have assumed an increasingly important role in the professional programs of numerous organizations and institutions (Kersch, 1971). In addition to sponsoring conferences, short courses, special classes, institutes, and workshops to stimulate professional development, they are investigating new procedures and programs.

Several documents describing these activities have been published recently. Three of these documents carry description of in-service program curricular that are noteworthy and adaptable to the needs of a variety of educational practitioners and settings. An overview of these programs follows.

The first, a discussion of "pre-service and in-service preparation of counselors and teachers for educational guidance," (APGA, 1970) presents four guidelines for use in ancillary in-service projects for use in planning, conducting, and evaluating the utilization of such ancillary in-service projects as the following: (1) professional and private organizational resources, (2) mobile supervising and resource units, (3) video seminars, and (4) conference theories coordinated with units, learning packages, and modules or independent study.

A second document of significance in the area of in-service programs entitled "Attitudes, Group Learning, and Attitude Change" (Rhyme, 1968) is a report of a special training institute. The institute was undertaken to determine the degree of attitude change related to group learning methods and social attitude set among seventy-two teachers and counselors participating in an in-service education program. The program provided an intensive eight week educational experience. The evidence following the education experience supported the study postulate that change is related positively to participation in an intensive education experience. The findings indicate that trainees were stimulated to increase their efforts to alter both attitude and cognition structure.

The findings of this study supported the in-service approaches advocated by Ressler (1973). His points were cited in an earlier discussion of this topic.

The third notable document, Continuing Education for Rehabilitation Counselors: A Review and Context for Practice and Research (Miller and Obermann, 1970), deals with the continuing education of rehabilitation counselors. The type of program it purports requires information on: (1) the structure and patterning of job task, (2) administrative practice and attitudes, and (3) practitioners (counselors, teachers) characteristic.

The report includes the review of literature on instructional principles, critical competence needs, and projected future in-service needs. Miller and Obermann state that:

Formats for training can be effective if designed according to what is known about teaching-learning strategies, audio-visual hardware, macro forms of learning, laboratory experience and curriculum level instruction.

The authors claimed that relating continuous education outcomes to job performance criteria is complicated in many ways, including the relative independence among intermediate criteria of the professional practitioner performance. Among the justifications offered for implementing in-service programs were:

1. Continuing education is critical to continuing and increasing professional competencies.
2. Continuing educational programs help educators' needs for practice and concrete training necessitated by the changing times in processes, strategies, view, procedures, and expectations.
3. A professional must interact with and beware of what his colleagues are doing. Therefore, conferences, workshops and seminars must be made wide available; regional and local workshops must be held and professional literature read.

The foregoing in-service activities focused on specific career development practitioners and their concerns. However, the principles and practices discussed are relevant to several dimensions of the classroom career education practitioner's role. Therefore, they are considered as having special relevance for the purposes of this study.

Context of Career Education Programs: A Synthesis

According to Evans and Lockwood (1974); Hansen (1970); Hoyt and Woodlard (1973); and Hoyt, Pinson, Lawrence, and Mangum (1973), many questions have been raised regarding teacher preparation for career education. Hansen (1973) has suggested that designers of teacher in-service career education programs should seek answers to the following questions: (1) What does a teacher need to know about career education to function effectively, (2) What kinds of attitudes and skills does he or she need to have, (3) What methods or strategies can he or

she utilize in implementation, and (4) How can the effectiveness of the career education efforts be evaluated? In addition, Hansen listed seven categories and data sources providing content, materials, and focus for career education in-service programs seeking answers to the questions raised.

A number of writers feel that in-service programs should be designed to help all educators to understand the nature of human development and that career education includes vocational and general education and is the instructive and experiential components of career development (Hoyt, 1972; Goldhammer and Taylor, 1972; Hansen, 1973; Gysbers and Moore, 1972).

Additional concern for career education in-service curriculum is a reflection of the basic elements, dimensions, and objectives which cover the aspects of self-awareness, occupational awareness, educational awareness, decision making, and planning behavior. Emphasis among authorities vary in focusing on occupational awareness and self-awareness (Tennyson, Klaurens, and Hansen, 1970; Drier, 1972).

Most writers stress the need for including information about the structure of work; the organization of the world of work and ways of clustering occupations in relationship to subject matter; changing work ethics; human power trends; and the sociological, psychological-economical, and leisure aspects of work (McDaniels, 1974; Venn, 1964; Borow, 1964; Issacson, 1971).

Some writers are beginning to emphasize the inclusion of strategies for identifying and utilizing resource materials in teacher in-service curriculum (Tennyson, 1970; Nelson, 1974; Leonard and Pietrofesh, 1974).

Swain (1971), Hoyt (1972), and Hansen (1973) claim that as career education becomes more pervasive through curricular infusion, it is likely that teachers will assume more of the educational and vocational guidance functions. If so, they will need some preparation in counseling. Hansen (1973) suggests that counselors seek to use teachers who relate especially well with students as career advisors. They should provide these teachers with the tools and special skills needed to carry out new roles in student development.

Ressler (1973), Keller (1972), Drier (1972), and Schaefer (1971) have urged in-service educators to be cognizant of career education content and ways that the change process is brought about. It is a well known conclusion that if adequate attention is not given to the processes by which programs are initiated, they are likely to suffer from insufficient support. The implementation and change processes should be geared toward the acquisition of knowledge, competency, and a sense of commitment.

The foregoing topical considerations are among major areas of emphasis found in the literature. It is apparent that because of the wide-spread national acclaim career education has been accorded, pre- and in-service teacher education programs will have to increase their emphasis on preparing teachers for career education classroom roles (Keller, 1972, 1974).

Summary Comment

In this section, attention has been given to the "nuts and bolts" aspects of teacher career education in-service programs. The

major topics discussed were concerned with: (1) the state of current provisions for career education in-service programs, (2) suggestions for providing in-service programs, (3) examples of career education in-service programs, and (4) the context of in-service approaches.

The major purpose of the discussion was to provide a broad overview of each of the topics enumerated. No attempt was made to discuss any one of these in a comprehensive fashion. The intent was to place the emphasis on efforts to provide in-service career education for classroom teachers.

A special emphasis was placed on "self-learning" on the part of the teacher, through participation in the development of career education programs and materials and teaming with school counselors in stimulating career education thinking in the school, home, and community environments. A short section on evaluation was included to point out that in the initial and final stages career education in-service programs will need to demonstrate positive effects on teachers' and students' performance.

SUMMARY

This chapter was concerned with: (1) the development, analysis, and synthesis of the career education concept and (2) in-service education programs aimed at preparing instructional personnel to meet the career development needs of middle school youth. It was shown that both career education and teacher preparation are based on sound theoretical formulations. Both are grounded in theory, based on the

psychological, sociological, developmental, and skill needs of students and teachers. The impossibility of providing an effective career development program for youth without bringing the needs of pupils and teachers together as they relate to instructional purposes was substantiated. It was found that in a very real sense, in-service deals with the curriculum: the many aspects of subjects or topics forming the classroom offerings, the enlargement of the offerings, the treatment of the various components of the offerings, and the directions in which to refocus interest and redirect effort.

The discussion treated functions of career developmental and career choice theory, teacher in-service preparation principles and practices, and research findings as related to middle school teacher preparation for career education. In addition, relevant aspects of standard curriculum integration endeavors were also presented.

Chapters dealing with the study methodology, results, presentation and analysis of data, summary, and conclusions will follow. The data for constructing the model framework for planning middle school career education teacher in-service preparation programs will be presented in the chapter dealing with the study findings.

Chapter 3

THE STUDY METHODOLOGY

The intent of this chapter was to describe the research design, the procedural plan, the development of the draft model, the selections of data collecting and analysis sources, the development and validation of data collecting instruments and procedures, the procedures for appraisal of the draft model and the development of the in-service model framework.

THE RESEARCH DESIGN

The methods and procedures used in descriptive research were considered most appropriate for this study. The procedures described as research and development (R & D) were employed (Best, 1970). An excerpt taken from a classification schema developed by Guba and Clark (1965) is presented in Table 1 to further clarify the basis on which the procedures of the design used in the study were selected. The full classification schema appears in Appendix A.

THE RESEARCH PROCEDURES

The research procedures for this study consisted of three related but separate operations which when integrated resulted in the development of a model framework for preparing in-service

Table 1

Excerpt from A Classification Schema of Processes Related to and Necessary for Change in Education

	Research	Developmental	
		Invention	Design
OBJECTIVE	To advance knowledge	To formulate a new solution to an operating problem or to a class of operating problems, i.e. to innovate	To order and to systematize the components of the invented solution: to construct an innovation package for institutional use, i.e. to engineer
CRITERIA	Validity (internal and external)	Face Validity (appropriateness) — Estimated Viability — Impact (relative contribution)	Institutional Feasibility — Generalizability — Performance
RELATION TO CHANGE	Provides basis for invention	Produces the invention	Engineers and packages the invention

Source:

E. Guba and D. L. Clark, "A Classification Schema of Processes Related to and Necessary for Change in Education," Strategies for Educational Change Newsletter, 1965, 1 (2), p. 25.

teachers to blend career education instruction and experiences into on-going middle school instructional programs.

The following procedures were used:

1. Review of the literature to obtain substance and data for developing the model framework.
2. Development of a draft model through an analysis and synthesis of data ascertained from the literature review.
3. Formative evaluation of the draft model by State of Virginia Career Education Project practitioners.
4. Revision of the draft model on the basis of data obtained from the formative evaluation.
5. Presentation of the final product for use.

The Development of The Draft Model

The draft model was developed after a review and analysis of the literature in the following areas: career development theory and research; career education instructional practices; instructional planning and curriculum innovations; and in-service theory, research, and practice. This analysis resulted in the identification and delineation of components that should be a part of an in-service career education instructional planning process. Each component was subsequently analyzed and organized in terms of a purpose, a rationale, and a set of procedures for planning the component. Synthesis of the components and their relationships resulted in a draft in-service planning model framework represented schematically with a set of written procedures.

Selection of Data Collecting
Analysis and Assessment Sources

Judgement data from career education practitioners as well as professionals experienced in the areas of planning, classroom instruction, and teacher in-service education were deemed to be of prime importance in the development of the model. Since teachers comprised the population for whom the model was to be developed, it was felt that career education project coordinators and/or practitioners had the prerequisite planning experiences and skills needed for insightful understanding and critical assessment of the procedures and components of the draft model framework. This dual perspective provided a broad scope for involvement of the practitioners in the Virginia projects in the data collecting and assessment procedures.

The selection of career education practitioners to serve as sources of information, analysis, and assessment of data was based on recommendations from three members of the investigator's advisory committee, including the chairman, Dr. Carl McDaniels, and former state supervisor of career education, Dr. Robert Crawford.

Dr. Crawford personally contacted directors of each of the five career education projects in Virginia and one in each of the the following states, North Carolina, Maryland, and Delaware. These contacts were made by telephone, letter, and face to face encounters.

Literary sources of data were referenced by standard library search procedures and with the assistance of numerous persons having

had experience in career education as a classroom teacher, counselor, administrator, supervisor, and teacher/counselor educator. A list of these persons and the areas they represent can be found in Appendix B.

Population Considerations

The selection of population centers for data collecting was governed by two concerns: availability and diversity. Availability, the first concern, was a relatively simple choice; it was determined by the number of existing funded career education projects within the state of Virginia.

With the assistance of the State Supervisor of Career Education, funded projects in Richmond, Petersburg, Radford, Bedford County, and Carroll County were identified as populations from which a sample of career education practitioners could be obtained to appraise the draft model. Fortunately, these projects included a middle/junior high school emphasis, met the criteria of diversity, and embodied demographic characteristics typifying Virginia population centers.

Data describing characteristics of the location of school systems represented by the validating panelists are shown in Table 2. These data revealed that the distribution included a large city, Richmond; a medium city, Petersburg; a small city, Radford; a medium county, Bedford; and a small county, Carroll. Consequently, with the exception of a large urban county, population centers typically found in Virginia and in most states were represented in the distribution. The variety evidenced provided a measure of transportability to be used in making generalizations regarding the model's adaptability for use in schools and school systems in a variety of geographic settings.

Table 2
 Typology of Validating Population Centers

Place	Type	Area	Population
Richmond	Large city	Urban	518,319
Petersburg	Medium city	Urban	36,103
Radford	Small city	Urban	11,596
Bedford	Medium county	Rural	32,739
Carroll	Small county	Rural	23,092

Source:

U.S. Department of Commerce. 1970 Census of Population and Housing. Washington, D.C.: U.S. Printing Office, September, 1971.

Selection of Evaluators

Five Virginia Career Education Project Directors served as sources for identification of educators with backgrounds in career education, staff development, instructional planning, and counselor or teacher educators whose input could assist in refining and improving the draft model. The following criteria were given to the project directors by the investigator to be utilized in the selection of the evaluators.

1. Successful experience in teaching, counseling, and/or administration
2. Knowledge of the local exemplary career education project, or
3. Experience in planning, developing, implementing, or evaluating career education programs, or some aspects of the local exemplary career education project's instructional program, operational procedures, and in-service goals and strategies.

Employing these criteria, the project directors selected five administrators and ten teacher/counselor types from each of the five funded career education projects to critically appraise the model. Each of the seventy-five persons selected agreed to participate in a model validating interview session conducted by the investigator during the month of February, 1976. However, due to unavoidable circumstances only seventy-four evaluators reported for the validating session. The composition of the validating panel and the interview schedule are shown in Tables 3 and 4, respectively. In addition, data describing the professional preparation and experiences of the validating panel are presented in Appendix C.

Table 3
 School Systems Represented and Composition
 of Validating Panel

School System	Number of Teachers	Number of Counselors	Number of Administrators	Panel Total
Richmond	8	2	5	15
Petersburg	8	2	5	15
Bedford	8	2	4	14
Carroll	8	2	6	16
Radford	8	1	5	14
	—	—	—	—
Totals	40	9	25	74

Table 4
Schedule of Interviews Conducted to Validate the
Middle School Career Education In-Service Model

Location	Date	Contact Person
Richmond, Virginia	2/10/76	Mrs. Ellen Chewning
Petersburg, Virginia	2/11/76	Mrs. Ellen Poole
Bedford, Virginia	2/13/76	Mr. Jerry Turpin
Hillsville, Virginia	2/16/76	Mrs. Glenda Dalton
Radford, Virginia	2/18/76	Mr. Randall Wright

The Instruments of Investigation

The instruments of investigation (Appendix D-G) and the supporting research tools consisted of five items. They were: (1) the draft model framework in schematic and narrative form, (2) an interview schedule, (3) a slide/transparency presentation, (4) a validating interview activity time table, and (5) an outline of the interviewer's role.

The draft model (Appendix D) served as the primary instrument of investigation. It contained sixteen components. These components identified and discussed salient elements of planning, developing, installing, managing, evaluating, and implementing career education in-service programs.

The interview schedule (Appendix E) contained three sections. The first section was labeled identifying information. Data were collected pertaining to the academic preparation, teaching experience, position held, academic undergraduate background, and career education in-service experience of the validating panel. These data were ascertained to provide insight into the distribution of positions held by the panelists, to shed light on the breadth of subject matter area representation achieved, in addition to indices of involvement in formal career education programs. The second section of the interview schedule contained ten forced-choice question type items. These items sought judgement data relative to such factors as the specificity, clarity, logicalness, comprehensiveness, completeness, and adequacy of the model's sixteen components, in addition to the sequence and relationship of data within components and between components. Section three of the validating

interview schedule contained three open-ended questions. These questions dealt with the appraisers' perception of the model's strength and weaknesses and made provision for unrestricted appraisers' comments.

The transparency/slide presentation featured selected elements of the background material which provided substance for the model and illustrations portraying applications of the model to career education in-service program development.

The activity time table (Appendix F) served as a management plan for the conduction of validating interviews and strategy for standardizing procedures. In addition, the utilization of the time table provided consistent timing of functions so that all visits were conducted in exactly the same manner.

Functions of the interviewer (Appendix G) served as a check list to enable the investigator to exercise the checks and balances necessary to set the stage, provide the goals, data and opportunities needed to enable the appraiser to function in an effective and efficient manner, thereby providing the investigator with reliable model revision data.

Validation of Instruments and Data Collecting Procedures

Establishment of the reliability and validity of the interview schedule used in conducting the data gathering phases of the study followed standardized research procedures. The purpose of the interview validating procedures employed was to make certain that the questions comprising the interview schedule were clear and lacking in ambiguity.

The interview questions were based on concepts and practices verified by various researchers. The questions were shown to have content or face validity. It was assumed that an indication of reliability could be achieved by subjecting the instrument to actual try out prior to formal use in data gathering and assessment activities.

Reliability establishing interviews were conducted at a nearby middle school. Ten teacher-volunteer appraisers selected by the school's guidance director were distributed copies of the model framework and asked to critically review the document in preparation for a group validating interview with the investigator, to be held seven days later during a period scheduled for released professional reading. The volunteer appraisers met with the investigator as scheduled on February 5, 1976, for one hour. At this time they were presented copies of the validating interview schedule, introduced to a visual presentation of the model and supporting material from the framework, and asked to record their reactions on the interview schedule. Informal discussion of the model's strengths and potential for utilization as an in-service tool on a released time basis in their school ensued. In addition, comments were made which addressed the mode and clarity of the instrument of investigation, the data collecting tools, and procedures. Comments were generally favorable; however, the necessity of making certain that members of the official validating panel critically reviewed the document prior to participation in the validating interview sessions was stressed. Prior review of the model was recognized by the

investigator as a factor which could affect the reliability of appraisal data collected. Therefore, greater attention was directed toward controlling for factors which could affect the quality of the desired data.

Content validity was established by use of the investigator's advisory committee, the pilot panelists, the research specialist who checked the appropriateness of the interview schedule for use in their school system. The fact that the investigator was an experienced professional counselor, counselor/teacher educator, and was knowledgeable about career education and interview techniques served to promote validity.

In summary, factors which could affect the reliability of information sought were controlled by the following means:

1. Copies of the document, "Blending Career Education Into The Middle School Instructional Program: A Model Framework For Teacher In-Service Programs," were distributed to project directors early enough to allow a week for advanced review.
2. Project directors were asked to distribute copies of the document for critical review to each person selected to appraise the model, at least one week prior to the date scheduled for the validation interviews.
3. Follow-up contact was made by telephone and letter to verify receipt, distribution, and encouragement of critical review of the document.
4. The investigator personally conducted all individual and group interviews.

5. Standard procedures were used in conducting the interviews with program directors and practitioners selected by them. These procedures are presented in Appendix F and G.

6. The assistance of the investigator's doctoral committee, several graduate students, and a research statistician consultant was solicited to finalize the instrument and to interpret the data collected through interview and questionnaire techniques. A copy of the interview schedule is presented in Appendix E. A composite report of the responses to this interview schedule appears in Tables 5 and 6 in Chapter 4.

Assessment of the Draft Model

Formative assessment procedures were employed as a systematic process for revising the draft model. The in-service planning model framework was viewed as a product. Therefore, the process described by Saunders and Cunningham (1973) appeared to be applicable to the development of the model framework. They described formative assessment as the process of determining the worth or value of a fluid process or product that can be revised in form. One primary source of formative assessment of information was referred to by Saunders and Cunningham as internal information. Such information results in inspection of the product and takes the form of descriptive data and critical appraisal. The assessment data collected during this phase of the study was the critical appraisal of the model by career education practitioners. The type of data was defined by Stake (1970:181) as "data that reflect professional judgment of what education should accomplish." The critical appraisal data were used to revise and refine the draft model constructed from an analysis and synthesis of the literature.

The Development of the In-Service
Model Framework and Data
Analysis Procedures

The critical appraisal focused on two areas: procedures within components and relationships among components of the draft model. An interview schedule was developed to focus on these aspects of the assessment. The questionnaire solicited forced choices in the "very," "yes," "to some extent," and "not at all" categories. The evaluators were practitioners selected and grouped by directors of funded Virginia career education projects. A criterion of 80 percent response agreement was selected to determine selection or deletion of the procedures and/or components. The decision to apply a .8 criterion to the components was based on traditional applications of a one to one hundred point scale in educational assessments. Usually on the basis of professional judgement, points on the scale below seventy are considered below average and too low, and points above ninety are considered by sheer chance to be a bit high. Therefore, the .8 percentage point was deemed sufficiently high to denote appropriateness of the procedural and content components of the draft model.

The rationale for the procedures used to assess the draft model were declared valid by Saunders and Cunningham (1973). They contended that on the basis of the observations of several evaluation authorities (Lumsdaine, 1965; Scriven, 1967; Stake, 1970; Cunningham, 1971) educators have a right to use professional judgement and logical analysis in the development and assessment of educational products. And also, that it is in consonance with this position that conversational sampling of

informal examinations of products made by relevant persons (teachers, project staff members, experts, or students) can produce valuable judgement data and is a useful tool for formative evaluation (Saunders and Cunningham, 1973).

Hence, on the basis of these authoritative views, professional judgement was exercised and the categories of "very," "yes," and "to some extent" were combined for application to the criteria. Therefore, if 80 percent agreement was found in practitioners' response to a question, the revision indicated was made. And finally, as previously stated, a .8 criterion was considered by the investigator to be significant. Therefore, revision of procedures and components were made on the basis of the professional judgement of the practitioners (Saunders and Cunningham, 1973).

SUMMARY

The investigator utilized descriptive research procedures to perform functions required in R & D studies in conducting the proposed investigation. The engineering process embraced the steps, criteria, and end results described by Guba and Clark (1965). Practitioners in five funded career education projects in the state provided data by which a draft model framework for planning career education in-service programs were assessed. Revisions were made in the draft model on the basis of this input. The development of the product in its final form followed. Specifically, five steps were followed in the development of the study product: (1) review of the literature, (2) construct a

draft model from a review of literature, (3) critical assessment of the draft model by career education practitioners, (4) integration of the formative evaluation from the critical assessment with the draft model, and (5) development of the product in its final form. As previously stated these procedures resulted in a product: an in-service planning model framework for teacher career education programs. The model has the following characteristics: appropriateness, estimated viability, institutional feasibility, generalizability, and potential for impact on performance.

This chapter addressed the following presentations: the study design, data collecting procedures, selection of data collecting analysis and assessment sources, instrumentation, control for selective factors (variation in procedures), validation of instruments, and a summary.

The next chapter will present the analysis, synthesis, and interpretation of the data. The final product--a model framework for planning in-service career education programs for middle school teachers--appears as Appendix H.

Chapter 4

PRESENTATION AND ANALYSIS OF DATA

This chapter reported and analyzed data utilized in the development of a model framework to be used in preparing in-service teachers to blend career education into the middle school instructional program. Three research procedures provided the data from which the model framework was developed. They were review of the literature from which the draft was developed, development of the draft model, critical appraisal of the draft model, and the revision of the draft model. These procedures provided the organizational pattern for reporting and analyzing the study data.

DEVELOPMENT OF THE DRAFT MODEL

The review of the literature in the area of career development theory and research, career educational instructional practices, instructional planning, curriculum innovations, and in-service theory and practices provided data from which the draft model was constructed. This draft consisted of sixteen components, identified from the literature and arranged in a logical sequence for in-service career education programming. The components embraced elements of planning, initiating, developing, installing, managing, evaluating, and implementing essential to the development of systematic and comprehensive career education in-service programs.

The initial phase of the research endeavor which extended over a nine month period (January, 1975, through September, 1975) embraced an extensive survey of the literature and numerous informal conversations with national and state career education experts dealing with critical issues and pertinent career education topics. Through the use of these procedures, the investigator obtained substance and data for developing the model framework.

The second procedure which employed the development of the draft model through an analysis and synthesis of data ascertained from the literature followed. This activity involved classifying materials extrapolated from the literature into categories consistent with the five research questions. An extensive analysis of the materials placed in each of the research question categories followed. This procedure resulted in the development and execution of a plan to extract substantive statements (of trends, issues, theoretical perspective, need, concepts, goals and in-service principles, and strategies) from the materials, within each question category, reproduce the substantive statements and group according to topics set forth in the outline for construction of a draft model framework. This outline, developed through consultation with career education experts and members of the investigator's doctoral research advisory committee, provided focus for synthesizing and structuring narrative and illustrative materials from which the model and framework were constructed. The service of three professional illustrators were obtained to enhance the investigator's attempts to promote clarity of major concepts through the use of

illustrative materials. These collaborative efforts resulted in the development and presentation of illustrations and the model in schematic form. In summary, the developmental phase embraced such activities as developing classification schemes for ordering data ascertained through the literature review, synthesizing concepts, generating ideas, and producing script from which a test, illustrative materials, a framework, and components for the model could be constructed. The period October, 1975, through January, 1976, was devoted to model framework construction activities from which the draft model framework in schematic and narrative form emerged.

The draft model in schematic and written form became the instrument of investigation and was subsequently subjected to formative evaluation procedures. The formative procedures involved submitting the model and framework to the critical appraisal of six groups of panelists. Five of the six groups of panelists were selected in keeping with the procedures for obtaining experts to appraise the model described in Chapter 3. A description of the process by which the sixth group was obtained follows.

As a result of interest generated in the model during the latter stages of its development, the services of twelve state leaders representing higher education and state department of education leadership in the areas of staff development, career education, and teacher education became available. Because they could provide valuable appraisal data and promote field-testing of the model and were willing to serve as appraisers they were added as a sixth group to the validating panel.

An interview schedule outlining the breakdown of elements proposed for use by teachers in planning, implementing, and evaluating teacher-generated and conducted in-service career education programs was presented with the model and framework to the six groups of panelists for appraisal. The interview schedule served the purposes of outlining procedures for the critical appraisal of the model and as a data collecting device. The results of the critical evaluation procedures utilized are described in the next section.

CRITICAL APPRAISAL OF THE DRAFT MODEL

As the result of the formative evaluation procedures employed in the study, critical appraisal data in the form of numerical ratings and narrative responses were provided. These data were reported as summaries of the appraisers' responses to questions in sections two and three of the validating interview schedule. The ratings, opinions, and suggestions provided by eighty-six appraisers on ten questionnaire-type items in section two are reported first. A summary of the results of three open-ended probes pertaining to the strengths and weaknesses of the model in section three was presented secondly and was followed with a brief discussion of the implications of these data for the final research procedure--revision of the draft model.

Section two of the validating inventory provided numerical and narrative data. These data are reported in Table 5 as total frequency counts in the forced-choice category, majority and minority percentage ratings, and accompanying explanatory comments submitted by the eighty-six appraisers.

Table 5

Summary of Appraisers' Responses to Validation Inventory
Questionnaire Items in Section II

1. How specific are the procedures as outlined in each component of the model?			
<u>No.</u>	<u>%</u>		
<u>43</u>	<u>50</u>	Very Specific	<u>Comments:</u> Overall responses indicated that the procedures were clear, specific, concise and well-documented.
<u>40</u>	<u>46</u>	Specific	
<u>3</u>	<u>4</u>	Somewhat Specific	
<u> </u>	<u> </u>	Not Specific	
2. How important are the components in the model?			
<u>No.</u>	<u>%</u>		
<u>59</u>	<u>68</u>	Very Important	<u>Comments:</u> Overall responses indicated that each component is equally essential and is presented in the order of extent to which it is dependent upon the one before, which leads to a strong, well-defined model.
<u>25</u>	<u>29</u>	Important	
<u>2</u>	<u>3</u>	Somewhat Important	
<u> </u>	<u> </u>	Unimportant	
3. How complete are the explanatory statements by which the components of the model are described?			
<u>No.</u>	<u>%</u>		
<u>47</u>	<u>54</u>	Very Complete	<u>Comments:</u> Overall responses indicated that enough explanation was given to justify the components and to show their interrelationships.
<u>37</u>	<u>43</u>	Complete	
<u>2</u>	<u>3</u>	Somewhat Complete	
<u> </u>	<u> </u>	Incomplete	
4. How relevant are the categories of topics suggested for planning in-service career education programs for classroom teachers (i.e., career development theories, attitudes, knowledges and understandings, and competencies)?			
<u>No.</u>	<u>%</u>		
<u>59</u>	<u>68</u>	Very Relevant	<u>Comments:</u> Overall responses indicated that the categories and levels to planning in-service career education programs covered the necessary topics and involvements made by teachers, consultants and schools.
<u>26</u>	<u>31</u>	Relevant	
<u>1</u>	<u>1</u>	Somewhat Relevant	
<u> </u>	<u> </u>	Irrelevant	
5. Are there competencies in the model which you would consider eliminating?			
<u>No.</u>	<u>%</u>		
<u> </u>	<u> </u>	Yes	<u>Comments:</u> Overall responses indicated that all of the components were essential and should be retained.
<u>5</u>	<u>6</u>	To Some Extent	
<u> </u>	<u> </u>	No	

Table 5 (continued)

6. To what extent would you be able to follow this model?			
<u>No.</u>	<u>%</u>		
<u>25</u>	<u>29</u>	Very Extensively	<u>Comments:</u> Overall responses indicated that the model was comprehensive, clear, easy to follow and an excellent curriculum guide.
<u>52</u>	<u>60</u>	Extensively	
<u>9</u>	<u>10</u>	Somewhat	
—	—	Extensively	
—	—	Not At All	
7. Are the components organized in a logical sequence?			
<u>No.</u>	<u>%</u>		
<u>50</u>	<u>58</u>	Very Logical	<u>Comments:</u> Overall responses indicated that the components were organized in a logical order.
<u>35</u>	<u>40</u>	Logical	
<u>1</u>	<u>1</u>	Somewhat Logical	
—	—	Not Logical	
8. How clear are the relations among components?			
<u>No.</u>	<u>%</u>		
<u>42</u>	<u>48</u>	Very Clear	<u>Comments:</u> Overall responses indicated that the logical organizational pattern made the relationships between the components clear and helpful.
<u>41</u>	<u>47</u>	Clear	
<u>3</u>	<u>4</u>	Somewhat Clear	
—	—	Unclear	
9. Do you understand what a teacher or trainer should do in each of the model components?			
<u>No.</u>	<u>%</u>		
<u>68</u>	<u>79</u>	Yes	<u>Comments:</u> Overall responses indicated that the roles of classroom teachers and trainers were clearly understood.
<u>18</u>	<u>21</u>	To Some Extent	
—	—	No	
10. Would you consider using the model?			
<u>No.</u>	<u>%</u>		
<u>73</u>	<u>85</u>	Yes	<u>Comments:</u> Overall responses indicated that the model was a valuable tool for developing in-service programs and could be used by classroom teachers, consultants, university professors, as well as by pre- and in-service teacher education program leaders.
<u>11</u>	<u>12</u>	To Some Extent	
<u>2</u>	<u>3</u>	No	

A breakdown of appraiser reactions to the questions posed in section two of the validating inventory by sub-groups is presented in Table 6. The composition of the sub-groups comprising the validating panel is shown in Table 3 of the methodology chapter. Members of the sub-appraisal groups averaged a total of fifteen career education practitioners selected by funded career education project directors in each of five Virginia school systems. In addition, twelve educational leaders in the state having career education responsibilities made up the sixth group of validating panelists.

Tallied responses presented in Table 6 show that the appraiser reactions to the model as indicated by questions dealing with the specificity of procedures outlined in each component, the importance of the components, the completeness of explanatory statements, the relevance of categories of topics suggested for in-service planning and curricular, logicalness of the organizational sequence, and clarity of relationships among components received positive forced-choice ratings of .95+. The responses averaged .97 validity rating. The responses to the questions of extent to which the appraiser would be able to follow the model received a .89+ percentage rating in the extensive/very extensive categories. Ten percent of the evaluators indicated that they would be able to follow the model somewhat extensively. In no case did a respondent indicate inability to follow the model. Majority positive answers were given by the appraisers to questions dealing with the appropriateness of competencies, the comprehensiveness of the trainers' or teachers' roles, and their interest in using the model.

Table 6

Distribution of Experts' Appraisal of the Model

Question	Rating Categories	A		B		C		D		E		F		Total	
		N = 15		N = 15		N = 14		N = 16		N = 14		N = 12		N = 86	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
1. How specific are the procedures as outlined in each component of the model?	Very Specific	6	40	12	75	6	43	5	31	7	50	7	58	43	50
	Specific	8	53	3	25	8	57	10	62	6	43	5	42	40	46
	Somewhat Specific	1	7					1	6	1	7			3	4
	Not Specific														
2. How important are the components in the model?	Very Important	14	93	11	73	10	71	9	56	6	43	9	75	59	68
	Important	1	7	4	27	3	21	7	44	7	50	3	25	25	29
	Somewhat Important					1	7			1	7			2	3
	Unimportant														
3. How complete are the explanatory statements by which the components of the model are described?	Very Complete	5	33	12	75	8	57	10	62	6	43	6	50	47	54
	Complete	10	67	3	25	5	36	6	38	7	50	6	50	37	43
	Somewhat Complete									1	7			2	3
	Incomplete														
4. How relevant are the categories of topics suggested for planning in-service career education programs for classroom teachers (i.e., career development theories, attitudes, knowledges and understandings, and competencies)?	Very Relevant	10	67	12	75	9	64	10	62	8	57	10	83	59	68
	Relevant	5	33	3	25	5	36	6	38	15	35	2	17	26	31
	Somewhat Relevant									1	7			1	1
	Irrelevant														
5. Are there competencies in the model which you would consider eliminating?	Yes														
	To Some Extent			1	7	1	7			2	14	1	8	5	6
	No	15	100	14	93	13	93	16	100	12	86	11	92	81	94

Table 6 (continued)

Question	Rating Categories	A		B		C		D		E		F		Total	
		N = 15		N = 15		N = 14		N = 16		N = 14		N = 12		N = 86	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
6. To what extent would you be able to follow this model?	Very Extensively	6	40	3	20	4	29	3	19			9	75	25	29
	Extensively	8	53	11	73	9	64	10	62	11	79	3	25	52	60
	Somewhat Extensively	1	9	1	9	1	7	3	19	3	21			9	10
	Not At All														
7. Are the components organized in a logical sequence?	Very Logical	14	93	9	60	5	36	7	44	8	57	7	58	50	58
	Logical	1	7	6	40	9	64	9	56	6	43	4	33	35	40
	Somewhat Logical											1	9	1	1
	Not Logical														
8. How clear are the relations among components?	Very Clear	5	33	10	67	7	50	6	38	4	29	10	83	42	48
	Clear	10	67	5	33	5	36	4	56	4	71	2	17	41	47
	Somewhat Clear					2	14	1	6					3	4
	Unclear														
9. Do you understand what a teacher or trainer should do in each of the model components?	Yes	10	67	14	93	11	79	13	81	11	79	9	75	68	79
	To Some Extent	5	33	1	7	3	21	3	19	3	21	3	25	18	21
	No														
10. Would you consider using the model?	Yes	13	87	11	73	12	86	14	87	12	86	11	92	73	85
	To Some Extent	2	13	3	20	2	14	2	13	1	7	1	8	11	12
	No			1	7					1	7			2	3

Specifically, 94 percent of the appraisers indicated that they would not consider eliminating any of the competencies; no appraiser indicated an inability to comprehend the roles of trainers and teachers; and only two appraisers indicated that they would not consider using the model. They qualified their answers by stating: "Our in-service program is very similar" and "We have covered most of this in our in-service program." This question was interpreted by one person who told the investigator that he had responded in this fashion to mean abandoning the procedures already in progress. This was not the interpretation accorded the item in question by others responding in the school systems where the negative attitude was registered. According to recorded comments on the inventory and remarks made personally to the investigator, this interpretation was not prevalent. Generally, career education practitioners and project directors indicated that they had begun to use ideas from the model and the framework in their efforts to enrich current undertakings and in long-range planning.

Table 7 contains a summary of the narrative remarks written in section three of the validating inventory. The responses were analyzed and placed into one of five categories: (1) strengths of the model, (2) weaknesses of the model, (3) appraiser misunderstandings, (4) miscellaneous comments, and (5) valid suggestions. Responses in the latter category served as a basis for revision of the model.

Table 7

Summary of Responses to Open-Ended Questions on
Section III of the Validating Inventory

PART 1

STRENGTHS*

C
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M
M
E
N
T
S

- It has the potential for enriching teacher education
- It is well organized and anticipates adequately the questions (and provides answers) that would likely be raised at the point of implementation
- It helps teachers understand clearly the interrelationships of career education and general education
- It provides sound theoretical bases for programs
- It provides broad platforms on which to build teaching learning activities avoiding the narrow "how-to-approach"
- Its focus upon total person and total curriculum
- Its interesting and informative illustrations
- It is practical in its ability to suggest, recommend and direct needed activities in career education
- It contains all steps necessary to achieve a successful program
- It used illustrations and figures to clarify written material
- It is limited only to the imagination of the individual implementing it within one's own classroom
- Its clear, concise, orderly and easily flowing format
- Its provisions for development and re-development of the program
- Its emphasis upon systematic planning, realistic evaluation procedures and sound management practices
- It is written in a form and a language which can be understood by teachers as well as counselors

*Responses to the question "What did you like most about the model?"

Table 7 (continued)

PART 1

STRENGTHS

The individual freedom allowed each teacher

The assumptions about teachers on page 11, because they indicate strengths on which we can capitalize

The Six-Cs on page 3, instructional imperatives for professional development

C
O
M
M
E
N
T
S

The model is very comprehensive and applicable to any setting or professional staff

The teaming and blending--the blending of all curriculum elements for all students and the involvement of all professional staff

The materials in the appendix

The model promotes procedures very similar to our own planning, therefore, many of its elements can be easily adapted to our needs

The extent to which the model uses present structure to implement career education

The flexibility and adaptability of the model

The specificity is such as to be definitive but not restrictive

PART 2

MISUNDERSTANDINGS

I feel students should be considered a part of the in-service

C
O
M
M
E
N
T
S

The model is too long in terms of my experiences, would suggest that models need to be concise and direct for utilization

The model should tell us how to do it

Too long

It may be too long

More detailed explanation would be helpful

Table 7 (continued)

PART 3

MISCELLANEOUS

A really unique contribution to in-service training which should command the attention of all teacher trainers

A needed contribution to the middle-school teacher

A model on which other models may be patterned

A good tool for management

This type of manuscript has been needed for some time--it should greatly facilitate the work that is needed on career education in the middle school

This model will be highly appreciated by practitioners and recognized as a much needed curriculum guide which synthesizes the thinking in the area of career education and makes available a functional instrument for use by in-service educators at all levels

This model captures the best of good professional development of teachers and applies it to the career development of individuals

I think any teacher could take this model and adapt it to their individual situation and come up with a good career education program

The value of the model lies in its implications to other in-service programs since career education is only one facet of a multi-dimensional staff development program

Teachers do not recognize their needs until they have to apply concepts

Even though most teachers think they are already teaching career education they need in-service programs (very in-depth) to help them all to be pointed in the right direction

Teacher involvement in in-service planning is imperative, but to organize in-service in many situations may be unrealistic

It needs to be presented to every school instead of 15 persons who work in the school system

C
O
M
M
E
N
T
S

Table 7 (continued)

PART 3

MISCELLANEOUS

C
O
M
M
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S

The potential value of this model in the promotion of career education through teacher education suggests that the model should be field tested in selected schools in Virginia. In the event the results of the field-testing attest the usefulness of the model, education would have a useful instrument for advancing career education on a broad scale

It would be extremely helpful in schools where there is no career education specialists or Director of Career Education to have the author of this model available to work with a school faculty for several weeks to give leadership in beginning the implementation of the model

PART 4

VALID SUGGESTIONS

<u>Topic</u>	<u>Additions</u>
Focus for Career Education Program Blends	Page 7, add Social Studies to school requirement*
Grade Level Composition of Middle/Junior High School	Pages 4 and 43, change grade levels from 4-9 to 5-9
The CE Triads	Page 69, provide examples of this in use
<u>Topic</u>	<u>Revisions</u>
Characteristics of a Comprehensive Career Development Program	Tie in with philosophy (relocate page 43, place behind page 11)*
In-Service Career Education Is	Make female character figures more pronounced by adding more eyebrows**
Competencies Listed in Appendix	Page 80, change word "persons" to "individuals"*
<u>Topic</u>	<u>Longitudinal Recommendations</u>
Potential Future Use of Model	Field-test in selected Virginia school divisions, Question 3, Section III of Validating Interview Schedule

*Revision made

**Suggestion appears in Chapter 5 under recommendations/implications

Table 7 (continued)

PART 5

WEAKNESSES*

Although I recognize that the model's philosophical base precludes the inclusion of a clearly defined career education curriculum, I wish there could be one because it is easier when we have a cookbook even if we don't use all of the recipes

Lack of specific guidelines for integrating model into unique interdisciplinary programs at the middle school level

It requires time which teachers so often do not have

Not being too specific as to any one topic that should be undertaken

The in-service curriculum

It might take too much of teachers' free time

The length might keep some teachers from reading it. Frankly speaking, the number of pages overwhelmed me initially, but once I got started, I found the supporting materials exciting, informative and most valuable, and the model to be an excellent guide for in-service

It may be too long as teachers do not tend to read materials of any appreciable length

One must get the overview in order to fully understand and appreciate the materials. You cannot just skim through, as most of the sections are not necessarily fully comprehended independently

Its success depends upon the schools: the school's philosophy, attitude of teachers, type of students, physical facilities, resources and funds

*Responses to the question "What do you like least about the model?"

The appraisers' reactions to the question "What do you like most about the model?" resulted in an array of responses which dealt with the value, clarity, thoroughness, conciseness, language, structure, illustrative materials, and the interrelatedness of the model's components and supporting framework. These responses shown in Part 1 of Table 7 support the data obtained from section two of the validating inventory. In addition, the responses to question three in section two "Any additional comments?" tended to reiterate the favorable ratings given the model in section two and the model's strengths as revealed by responses to the question "What do you like most about the model?" These statements are reported as miscellaneous comments in Part 3 of Table 7. In addition, several valid suggestions were offered in the space provided for free comments. They provided the data for revision of the model and are reported in Part 4 of Table 7.

Responses to the question "What do you like least about the model?" were rather parsimonious. Most appraisers indicated either by omissions or frankly stating that they had no negative reactions or could not identify any specific features of the model which constituted a dislike. Samples of these types of reactions, as well as the comments of evaluators who recorded specific things which could be considered least acceptable to them, are reported in Part 5 of Table 7 as weaknesses.

The weaknesses, for the most part, addressed such topics as: length, lack of a specific in-service curriculum, and the limited "how-to's" imposed by the model's philosophical undergirding. When compared

with the majority opinion, it appears that these comments may reflect the respondent's personal tolerance for ambiguity of their indepth understanding of the impact, flexibility, freedom, and the absence of details have on many educators. The following comment made by one appraiser reflects this feeling--"Although I recognize that the model's philosophical base precludes the inclusion of a clearly defined career education curriculum, I wish there could be one because it is easier when we have a 'cookbook' even if we don't use all of the recipes." The illustrations on pages 223-232 and examples on pages 134-151 for implementing the model were recognized as valuable contributions.

Comments regarding the length of the model and student involvement as part of the in-service were considered as questionable and are reported as misunderstandings. It is highly possible that the comments were in reference to the length of the manuscript rather than to the model length. The fact is that two formats were used to present the model: a one-page graphic illustration and a four-page outline. When compared to models presented in other contemporary manuscripts, the model under study is relatively short. As is the case in the present works, the term model appears as part of the title of several recent publications cited in the reference and bibliographical sections of the manuscript and may account in part for this erroneous interpretation. Therefore, the investigator concluded on the basis of logic and majority opinion that efforts to shorten the model were not warranted. This decision was reinforced by the .94 and .97 positive reaction to the questions "Are there competencies in the model which you would consider eliminating?" and "Would you consider using this model?", respectively.

It appeared that any attempts to make reactions of the model components more explicit could not be logically justified on the basis of the limited number of suggestions in this regard. In addition, the investigator recognized that no one included was knowledgeable enough to prescribe specifically for meeting every student's, teacher's, or school's career education program needs in the state. Therefore, it was necessary to reconcile the zeal to be as helpful as possible with a common sense approach until more specific research data was available.

Since the key element in the in-service program was application of the teaching/learning strategies in actual classroom practice, evaluation and revision or elimination efforts were made to deal with these suggestions.

The conclusion drawn was that the results of the analysis of numerical and narrative appraisal data indicated that the model was viewed as having strong potential for use as an in-service instrument, a career education course curriculum guide, and a management tool. The implications of the data analysis for revision of the model follows.

REVISION OF THE DRAFT MODEL

The final research procedure, revision of the draft model, was accomplished by integrating appraisal data provided by the validating panel with the draft model. The appraisal data consisted of numerical and narrative responses describing the worth or value of the draft model. The results of the analysis of the critical evaluation, presented in Tables 5, 6, and 7, provided the basis for revising, deleting, or

extending components of the model. A .8 criterion established in the study methodology as significant to selectively discriminate among those procedures which could be considered as essential for the model revision was employed. A discussion of the results of this aspect of the research procedure follows.

The tallied responses relating to the appraisers' reactions to the model indicated that in no component did the .8 criterion measure indicate deletion, extension, or revision of any procedure. In fact, the numerical data indicated that an overwhelming majority of the appraisers considered the model components and the explanation as most appropriate. Their comments indicated that the supporting materials, background and theoretical information, and the illustrations, made the product a valuable contribution to in-service education.

No revisions were made in the draft model on the basis of critical appraisal data provided by a majority of the validating panelists. However, some of the informal comments reported in Table 7 were incorporated into the framework. An asterisk is used in the table to indicate this action. Generally, the data in Tables 5, 6, and 7 reflect a favorable attitude toward the model and the supporting framework.

Critical analysis regarding the reason for the general agreement produced by the critical appraisal led to several speculations. It is possible that some of the evaluators did not take the time necessary to carefully review and critically appraise the model. However, the feedback received prior to and following the validating interview sessions, in addition to some of the provocative and/or lengthy narrative

responses (section three of the interview schedule), indicated that most evaluators had devoted considerable time prior to the interview session to reading the materials critically. Consequently, they had no reason to resort to indiscriminant marking of forced-choice responses.

The majority agreement could also be attributed to a lack of indepth knowledge of career education planning, in-service approaches, and classroom blending strategies. However, the career education experience backgrounds of the appraisers from public school settings and state department of education and teacher and counselor education personnel seemingly contradicts this assumption.

Another conjecture, the lack of understanding could have been supported by the providing of extensive negative comments or the absence of comments due to reluctance to comment on the vague or the unknown aspects of the subject and, therefore, apparent agreement surfaced. To negate this interpretation of respondents' behavior, the investigator encouraged appraisers to indicate their inability or reluctance to respond so that failure to record comments in all spaces provided would not be interpreted erroneously.

The conclusions and most obvious plausible explanation for the favorable appraisal is the model and framework needed little revision. When the quantity of time expended, the quality of data utilized, the systematic and painstaking research, and developmental procedures employed in the development of the model and framework are considered, the favorable appraisal does not appear as questionable. It can be concluded that the model merited a favorable rating.

It recognized, however, that this study was limited to the first two phases of a possible three phase research schema. These phases were development and validation. The study is therefore limited in field test data. This fact serves to emphasize the need for further research and study which embraces the third phase--adoption. Adoption consists of field test or trial, installation, institutionalization, and long range evaluation.

SUMMARY

This chapter reported the results of three research procedures described in the methodology chapter: the development of a draft career education in-service training model, critical evaluation of the draft model, and revision of the draft model. Data collected on a validating interview schedule provided the critical appraisal data and was reported in Tables 5, 6, and 7. The career education in-service model which resulted from the use of these procedures was presented in schematic and narrative form. The model appears as Appendix D.

Chapter 5

SUMMARY, CONCLUSIONS, OBSERVATIONS, AND RECOMMENDATIONS

This chapter presented a summary of the study, conclusions, observations, and recommendations for educational practice and research. Included in the summary section were the purpose, rationale, and brief descriptions of the research questions, methods and procedures, and the results of research procedures employed in this study.

SUMMARY

Purpose

The purpose of this study was to develop a model which would provide a systematic and comprehensive approach to planning in-service career education programs for middle school teachers.

Rationale

Career education has gained much national acclaim within a period of five years. Since 1971, it has received the special attention of the United States Office of Education and the recognition of a growing number of educators. In this time span, much has been accomplished in the way of establishing "career education" as a legitimate educational concept.

A growing number of school systems have begun to deal with problems inherent in implementing the concept into on-going school

programs. Among the critical issues and problems identified by schools attempting to introduce career education into the curriculum was staff development, particularly, the preparation of teachers. The need for a framework for accomplishing the teacher preparation phase of career education has been cited by a number of writers and educational practitioners (Taylor, 1971; Goldhammer, 1971; Hoyt, 1972; Keller, 1974; Marland, 1974). These writers perceived classroom teachers as being the catalyst needed at this time to expand the interest and participation in career education on a basis broad enough to permeate the entire school. A most striking statement of justification came from Ryan (1974). He declared that ". . . if career education is to mature from its beginning, it is vital that future research and developmental efforts furnish guidelines to provide directions for teachers, counselors, and school administrators." He further added, "A contribution of significance could be the publication of a guideline for in-service training that would provide consistency throughout a state or region."

The present study was a response to this need. It purported to develop a model framework for planning teacher in-service programs. It focused on the in-service career education preparation of teachers of middle school youth for the following reasons. According to the findings of Gibbons and Lohnes (1968), McDaniels (1968), Super (1960), and Herr (1972) middle/junior high school youth are extremely needy and ready for assistance in preparing for adult roles. These youth are at a most crucial state in their development. Assistance and decisions made at this time are directionally more important in determining developmental

patterns than at any other period. Choices made and options exercised in undertaking their in and out of school learning and experiential activities-program have a far reaching impact on later education and employment opportunities. Consequently, if a single group of educators is to be singled out for in-service career education preparation, teachers of middle school youth would be a most appropriate and logical choice. In addition, the findings of studies by Bailey and Stadt (1973) and Evans, Hoyt, and Mangum (1973) supported the claim that less attention has been given in the literature and research endeavor to the needs of middle and junior high school teachers and students than to those of teachers and students at other levels.

However, in response to the need for program material to facilitate elementary career education program activities, commercial publishers, inventive educators, and free lance authors produced an abundance of career education materials. While most of these materials were rapidly produced, they filled the need for materials to move career education through the initial phases. Now that the career education concept is being pursued vigorously in every state, the need exists for comprehensive materials for systematizing program development activities, in addition to that of gearing nationally produced materials and to adapt existing published and unpublished materials to specific instructional and programmatic needs. Therefore, the proposed in-service teacher career education preparatory model was considered to be a useful tool for preparing teachers to fill current and projected gaps in career education materials and practices.

In addition, it addresses the current need for pre- and in-service preparation programs described by Gysbers (1974):

. . . are not yet providing sufficient educational experiences designed to prepare teachers, counselors and administrators to develop comprehensive career education programs. Neither are there preparation programs providing the level of assistance needed to improve and extend the career education competencies of existing school personnel. While many educators recognize this situation and are making substantial strides to overcome it, they are hampered by the lack of well established career education theory, methods and resources.

The literature showed little response to the situation described by Gysbers. Because few professionals, according to Drier (1972), have addressed the specific in-service career education needs of school teachers in a systematic and comprehensive manner, the construction of a model to prepare middle school teachers to blend career education into on-going instructional programs was undertaken.

Research Questions

An attempt was made in this study to provide answers to questions which would facilitate the development of an in-service planning model by which classroom teachers could be prepared to select and utilize instructional materials and methods appropriate to the career developmental needs of middle school youth.

Five questions were constructed to give guidance to the development of the model. They were as follows:

1. What are the distinguishable characteristics of career education in-service programs for teachers of middle school youth?
2. What core career developmental concepts are germane to teachers' understandings of the career developmental needs of middle school youth?

3. What are the elements of a model framework for planning teacher in-service programs in career education?
4. What are the components (goals, content, strategies, and alternative procedures) of a model framework that can easily be adopted to a variety of middle school teachers' in-service program needs?
5. What are the guidelines for selecting strategies essential to the effective utilization of community resources in career education in-service programs (i.e. parents, employers, advisory groups, civic, and social organizations)?

Methods and Procedures

The methods and procedures used in descriptive research were employed in this study. These research procedures consisted of three related but separate operations which when integrated resulted in the development of a model framework for preparing in-service teachers to blend career education instruction and experiences into on-going middle school instructional programs.

The following procedures were used in the study:

1. Review of the literature to obtain substance and data for developing the model framework.
2. Development of a draft model through an analysis and synthesis of data ascertained from the literature review.
3. Formative evaluation of the draft model by State of Virginia Career Education Project practitioners.
4. Revisions of the draft model on the basis of data obtained from the formative evaluation.
5. Presentation of the final product for use.

Results of Research ProceduresEmployed

The initial phase of the research and development endeavor, which extended over a nine month period (January, 1975, through September, 1975), embraced an extensive survey of the literature and numerous informal conversations with national and state career education experts. The results of these two procedures--the extensive analysis of relevant literature and consulting with career education experts--provided focus for a detailed review of especially pertinent literature.

A review of literature in the area of career development theory and research, career education instructional practices, instructional planning, curriculum innovations and in-service theory, and practice provided data from which the draft model was constructed. This draft model consisted of sixteen components identified from the literature and arranged in a logical sequence for in-service programming. The draft model served as the instrument of investigation for the second procedure, formative evaluation.

Critical appraisal by a panel of experts was selected as the formative evaluation procedure. Eighty-six experts in the areas of educational administration, teacher education, counselor education, and classroom instruction who were actively involved in career education were selected to appraise the model. The experts were selected by the former Virginia state supervisor of career education and career education project directors. Each expert was asked to critically review the model framework in preparation for a validating interview session to be

held with the investigator. An interview schedule prepared by the investigator to guide the appraisal process was used at the end of the interview sessions to collect the appraisal data.

The interview schedule solicited forced-choice responses in ten categories dealing with the clarity, completeness, extensiveness, logicalness, comprehensiveness, applicability, and suggestions for deletions.

The experts provided responses to the ten items in addition to three open-ended questions. A .8 criterion response agreement was applied to the forced-choice categories to determine the value of the model components accompanying these forced-choice items and those recorded in the free narrative areas were used to determine what additions, deletions, or revisions would be made in the model. The narrative responses were categorized as strengths, weaknesses, miscellaneous comments, misunderstandings, and valid suggestions. Both forced-choice and narrative responses provided data for revision of the draft model.

The in-service model framework resulted from the synthesis of the data sources--the draft model constructed from the literature review and the critical appraisal data. The draft model represented the main body of the study and was revised on the basis of the formative evaluation data. Generally, the evaluation responses were very favorable and indicated that no changes were needed in the model and only minor changes in the framework were needed.

In the final step, a model framework was developed which provides systematic and comprehensive approaches to the process of career education in-service programming at the middle school level.

CONCLUSIONS

On the basis of data presented and analyzed, it was concluded that the literature contained extensive treatments of topics pertinent to in-service career education as isolated entities but not as integrated elements which focused on total curriculum--all students and all teachers at the middle school level. Furthermore, that many of the topics treated in the literature could be reviewed, analyzed, and synthesized to provide data from which a model in-service career education program could be constructed.

Five additional conclusions drawn from the data addressed the research questions specifically. The questions are listed in the "Research Questions" section on page 107. The answers to these questions are as follows:

1. Distinguishable characteristics of career education in-service programs for teachers of middle school youth were identified in terms of students and teachers career education needs. These were set forth in terms of the unique problem of middle school youth and the corresponding responsibilities of their teachers.

2. Core career developmental concepts germane to teachers' understanding of the career developmental needs of middle school youth were extracted from the literature and blended into the model framework to provide processes for generating strategies for use at the classroom level. The eight concepts identified--career awareness, self-awareness, self and social appreciation and attitudes, educational awareness,

decision-making skills, economic awareness, skill-awareness/beginning competence, and employability skills--were set forth in the USOE model and are presented in Figure 6 of Appendix H. Procedural support for implementation of these core concepts were provided in the components of the model. In addition, four illustrations were presented in which the core concepts could be adapted to in-service content, procedures, and classroom activities to achieve career education program goals.

3. Elements essential to the development of the model framework for planning career education in-service programs were identified, analyzed, and synthesized to provide graphic and narrative guidelines. These elements provided the descriptors for the model's sixteen components and embraced such topics as need identification, organization of advisory and/or steering committees, determining appropriate curriculum, creating favorable climate and teaching/learning conditions and implementing planning, managerial, and evaluation strategies.

4. A commonality in career education program goals exist. Similarity of objectives give rise to common problems in administration, in-service leadership, curriculum content, instructional methods, materials and equipment, implementing strategies, and alternative procedures. The model framework provided components which could be adopted to meet a variety of middle school teachers' career education preparatory needs. In addition, the background and application materials which made up the framework, desired competencies, and basic resources (Appendix B and C, respectively) provided specific materials which addressed the common program goals, administrative problems, leadership needs,

curriculum content, instructional methodology, program development, and implementation strategies.

5. Guidelines for selecting strategies to the effective utilization of community resources in career education in-service were identified, analyzed, and presented in illustrative and narrative form in the model and framework. Specific aspects of community resource utilization were portrayed in the section "Career Education In-Service Is . . ." on page 222 and in the list of competencies on page 260 (Appendix H).

In summary, conclusions of particular significance drawn from the data were that:

1. Five questions guided the development of the comprehensive in-service career education program planning model.
2. Elements identified in the literature enabled the development of a framework which presented the in-service processes in two formats-- narrative form and schematic model. Each format depicted components and their interrelationship and provided functional planning and operational procedures to facilitate implementation of the model. And, in addition, provided four examples of programs utilizing the model.
3. The use of contextual data from observation and from the archives is a valuable source of information for project assessment and can provide evidence which is unavailable from the use of other techniques.

FIELD TEST OBSERVATIONS

A distinctive feature of the data gathering aspect of this study was an opportunity to study unobtrusive measures of attitudes, operational

procedures, career education resource materials, and equipment, in addition to goals and outcomes of program activities unique to the funded career education projects visited, individually and collectively. This procedure and the methods employed to study the archives and the contextual sources of data were strongly recommended by Webb, et al. (1971).

The methods employed, incidental observations, and retrospective analysis defied statistical measurements; yet, they provided the investigator insights into concerns, methods, and achievement pertaining to: adapting methods to needs, knowing what procedures and materials possess greatest utility, standards for judging the value and appropriateness of commercially and locally produced materials, the impact of administrative career education philosophy and leadership style, the availability of funding on program development, enthusiasm, and in-service provisions.

Reflections on observations made during: (1) validating interview sessions, (2) pre- and post-validating interview reviews of local program goals, procedures, and activities, (3) examination of commercially and locally produced materials, and (4) inspection of program activities in progress enabled the investigator to make the following generalizations.

Teachers, counselors, and administrators encountered tended to manifest a positive attitude toward career education.

Educators who participated in career education in-service programs were: (1) provided opportunity for establishing interacting patterns conducive to collaborative planning, (2) exposed to elements of career planning, decision making, and affective behavior strategies,

(3) encouraged to experiment with the infusion of career education elements into instructional content, and (4) attuned to the role of in-service in career education program development and implementation.

A strong desire exists among educators for practitioner handbooks containing validated and tested instructional procedures, activities, and materials for classroom and in-service use.

A firm belief that the concepts, practices, and curriculum materials developed by their project can serve as models for schools beginning or expanding career education programs prevailed among project participants.

Task forces and advisory committees have been employed on a very limited basis in the initiation, development, and implementation of the career education projects in most school systems.

Team work and in-service have been utilized to establish meaningful processes for implementing K-9 career education program activities.

While considerable use has been made of summer vacation time for in-service activities, little or no use of released time has been employed at the classroom teacher level.

Teachers and counselors in some of the project schools have come to a realization that they can work together cooperatively and effectively toward the achievement of both individual and shared career development goals.

Strong interest was manifested in having industrial/business and government/work knowledge tours included in in-service practices.

The application of teacher-centered, class-centered, and self-directed learning structures were conceptualized; the salient character of each style and its value as a career education instructional strategy was gaining appropriate recognition.

Organizational structures and processes appeared to be contingent upon the nature of the people in the organization. These structures encompassed varying dimensions and linkages in organizational support structures and bureaucratic, collaborative, and coordinative leadership styles.

A preference exists for research and career education literature which provides mechanics for producing results, rather than presentations allowing for generalizations to be drawn from technical reports and scholarly narratives.

A strong need is felt for structures which provide a more basic grasp of career education in-service elements, instructional strategies, and program development approaches.

Finally, and perhaps the most rewarding of the obtrusive indices was the opportunity afforded the investigator to work with the types of professionals and school systems one could normally expect to work with as a staff development consultant or a career education specialist.

RECOMMENDATIONS

It is recommended that:

1. Field testing of the model be undertaken among diverse teacher and student populations to determine what adaptations are

needed as a function of student, school, and teacher characteristics. It is conceived that the fundamental elements in the model and framework would remain unchanged; however, procedures, context, and resources would need to be added or deleted to meet career education instructional needs of diverse populations.

2. Teacher education institutions make a greater effort to incorporate career education concepts in all phases of the pre- and in-service preparation of teachers.

3. Career education workshops be conducted for teachers, counselors, and administrators according to need. Workshops should be jointly planned by public schools and state department of education instructional division personnel. Tuition free credits, released time, or additional remuneration should be provided for the participants.

4. State departments look more closely at funding levels and procedures for staff development programs with career education emphasis.

5. Administrators, counselors, career education program directors, and resource teachers give emphasis to establishing positive attitudes within the school and community for career education concepts and practices. Every opportunity should be taken to present the goals and achievements of career education programs to students, parents, and the community.

6. Writers and researchers in career education give greater attention to the problems and issues involved in the development of career education preparatory programs and materials for pre- and in-service teachers and other educational personnel.

7. Researchers exercise precaution in the undertaking of R & D type research to avoid emotional problems associated with low tolerance for ambiguity and a limited number of experienced personnel to provide consultation in the art of combining the research and development phases of the R & D Model.

8. Researchers conduct their investigation in manners that provide for the collection and utilization of contextual data.

SUMMARY

This chapter summarized the study, presented conclusions drawn from the analysis of data, discussed the study results, and made recommendations for educational practice and further research.

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APPENDICES

APPENDIX A

A CLASSIFICATION SCHEMA OF PROCESSES RELATED TO AND
NECESSARY FOR CHANGE IN EDUCATION

Table 8

A Classification Schema of Processes Related to and
Necessary for Change in Education

	Research	Development		Diffusion		Adoption		
		Invention	Design	Dissemination	Demonstration	Trial	Installation	Institutionalization
OBJECTIVE	To advance knowledge	To formulate a new solution to an operating problem or to a class of operating problems, i.e., to innovate	To order and to systematize the components of the invented solution to construct an innovation package for institutional use, i.e. to engineer	To create widespread awareness of the invention among practitioners, i.e., to inform	To afford an opportunity to examine and assess operating qualities of the invention, i.e., to build convention	To build familiarity with the invention and provide a basis for assessing the quality, value, fit, and utility of the invention in a particular institution, i.e., to test	To fit the characteristics of the invention to the characteristics of the adopting institution, i.e., to operationalize	To assimilate the invention as an integral and accepted component of the system, i.e., to establish
CRITERIA	Validity (internal and external)	Face validity (appropriateness) — Estimated Viability — Impact (relative contribution)	Institutional Feasibility — Generalizability — Performance	Intelligibility — Fidelity — Pervasiveness — Impact (extent to which it affects key targets)	Credibility — Convenience — Evidential Assessment	Adaptability — Feasibility — Action	Effectiveness — Efficiency —	Continuity — Valuation — Support
RELATION TO CHANGE	Provides basis for invention	Produces the invention	Engineers and packages the invention	Informs about the invention	Builds conviction about the invention	Tries out the invention in the context of a particular situation	Operationalizes the invention for use in a specific institution	Establishes the invention as a part of an ongoing program; converts it to a "non-innovation"

Source:

E. Guba and D. L. Clark, "A Classification Schema of Processes Related to and Necessary for Change in Education," Strategies for Educational Change Newsletter, 1965, 1 (2), p. 25.

APPENDIX B
RESOURCE PERSONNEL AND VALIDATING
PANEL OF EXPERTS

Virginia Polytechnic Institute and State University, College
of Education:

1. Dr. Fred Brieve, Professor, Educational Administration and
Planning

2. Dr. William Dugger, Associate Professor, Industrial Arts
Education and Director of CACO Project

3. Dr. Curtis Finch, Associate Professor, Vocational and
Technical Education

4. Dr. Tom Hohenshil, Associate Professor, Career Education
and Counseling

5. Dr. Carl McDaniels, Director of Graduate Studies and
Research

6. Dr. Ralph Ressler, Principal Investigator, CACO Project

7. Dr. Alan Sheppard, Assistant Professor, Vocational and
Technical Education

8. Dr. Anita Webb, Assistant Professor, Home Economics
Education

Other:

1. Ms. Mary B. Antholz, Staff, Appalachia Educational
Laboratory

2. Mrs. Katherine Cole, Former Director of Career Development,
District of Columbia Schools; Currently Associate Professor of Education,
Bowie State College

3. Mrs. Ellen Datcher, Assistant Director, Career Development
Exemplary Project, District of Columbia Schools

4. Mr. C. Wayne Dillon, Career Education Consultant, North Carolina State Department of Education, Raleigh, North Carolina

5. Dr. Max Eddy, Professor, Industrial Education, Purdue University, Lafayette, Indiana

6. Mr. Robert V. Jervis, Coordinator of Career Education, Board of Education, Annapolis, Maryland

7. Mr. Gary Kelly, Supervisor of Guidance, Roanoke County Schools, Salem, Virginia

8. Mrs. Nancy Pinson, Specialist, Pre-Vocational Education, Maryland State Department of Education, Baltimore, Maryland

9. Dr. Eldon Ruff, Chairman, Division of Education, Indiana University at South Bend, South Bend, Indiana

10. Mr. Robert L. Wise, Chief, Career Awareness Division, National Institute of Education, Washington, D.C.

Virginia Middle/Junior High School Career Education Personnel:

1. Miss Sue B. Burton, Teacher, Christiansburg Elementary School, Christiansburg, Virginia

2. Mrs. Roberta Caston, Head Counselor, Henderson Middle School, Richmond, Virginia

3. Mrs. Claire Cole, Counselor, Blacksburg Middle School, Blacksburg, Virginia

4. Mr. Garfield Jackson, Instructional Supervisor, Petersburg City Schools, Petersburg, Virginia

5. Mr. Ray Largo, English Teacher, Intermediate Grades, Bedford Elementary School, Bedford, Virginia

6. Mrs. Sue Murray, Pre-Vocational Business Teacher, Blacksburg Middle School, Blacksburg, Virginia

7. Mrs. Linda Phillips, Physical Education Teacher, Blacksburg High School, Blacksburg, Virginia

8. Mrs. Julia Varner, Former Junior High Pre-Vocational Business Teacher and Counselor; Currently Ninth and Tenth Grade Counselor, Granby High School, Norfolk, Virginia

9. Mrs. Bertha Wiley, Pre-Vocational Homemaking Teacher, Blacksburg Middle School, Blacksburg, Virginia.

Virginia Career Education Project Directors

1. Mrs. Ellen Chewning, Richmond City Schools, Richmond, Virginia

2. Mrs. Glenda Dalton, Carroll County Schools, Hillsville, Virginia

3. Mrs. Ellen Poole, Petersburg City Schools, Petersburg, Virginia

4. Mr. Jerry Turpin, Bedford County Schools, Bedford, Virginia

5. Mr. Randall Wright, Radford City Schools, Radford, Virginia

State Leaders:

1. Dr. Paul Behrens, President, Virginia Vocational Guidance Association

2. Dr. E. B. Boone, Professor of Educational Research, Director of Counselor Education, and former Dean of Academic Affairs, Virginia State College, Petersburg, Virginia

3. Mr. John Cook, Supervisor of Guidance, Virginia State Department of Education, Richmond, Virginia

4. Miss Margaret Gordon, Associate Professor of Secondary Education, Norfolk State College, Norfolk, Virginia, and former middle school principal
5. Dr. H. H. Marshall, Director of Continuing Education, Norfolk State College, Norfolk, Virginia
6. Dr. Grace Matthews, Adjunct Professor of University of Massachusetts, Director of Academy of the Street and Director of Counseling Center, Virginia Union University, Richmond, Virginia
7. Dr. Sue Mays, Director of Vocational Education, Scott County Public Schools
8. Mrs. Joyce Osborne, Director of Career Counseling and Placement of Scott County Public Schools and Past President of Department of Guidance of Virginia Educational Association
9. Mrs. Evelyn S. Peevy, Past President of Hampton Roads Personnel and Guidance Association and Director of Guidance, Jacox Jr. High School, Norfolk, Virginia
10. Dr. Carl Riehm, Assistant Superintendent for Instruction, Virginia State Department of Education, Richmond, Virginia
11. Miss Vivian Williamson, Assistant Supervisor of Guidance, Virginia State Department of Education, Richmond, Virginia
12. Dr. Elaine Witty, Consultant, National Teachers Corps Project and Chairman of Department of Elementary Education, Norfolk State College, Norfolk, Virginia

APPENDIX C

COMPOSITION OF VALIDATING PANELISTS BY
IDENTIFICATION INFORMATION

Table 9

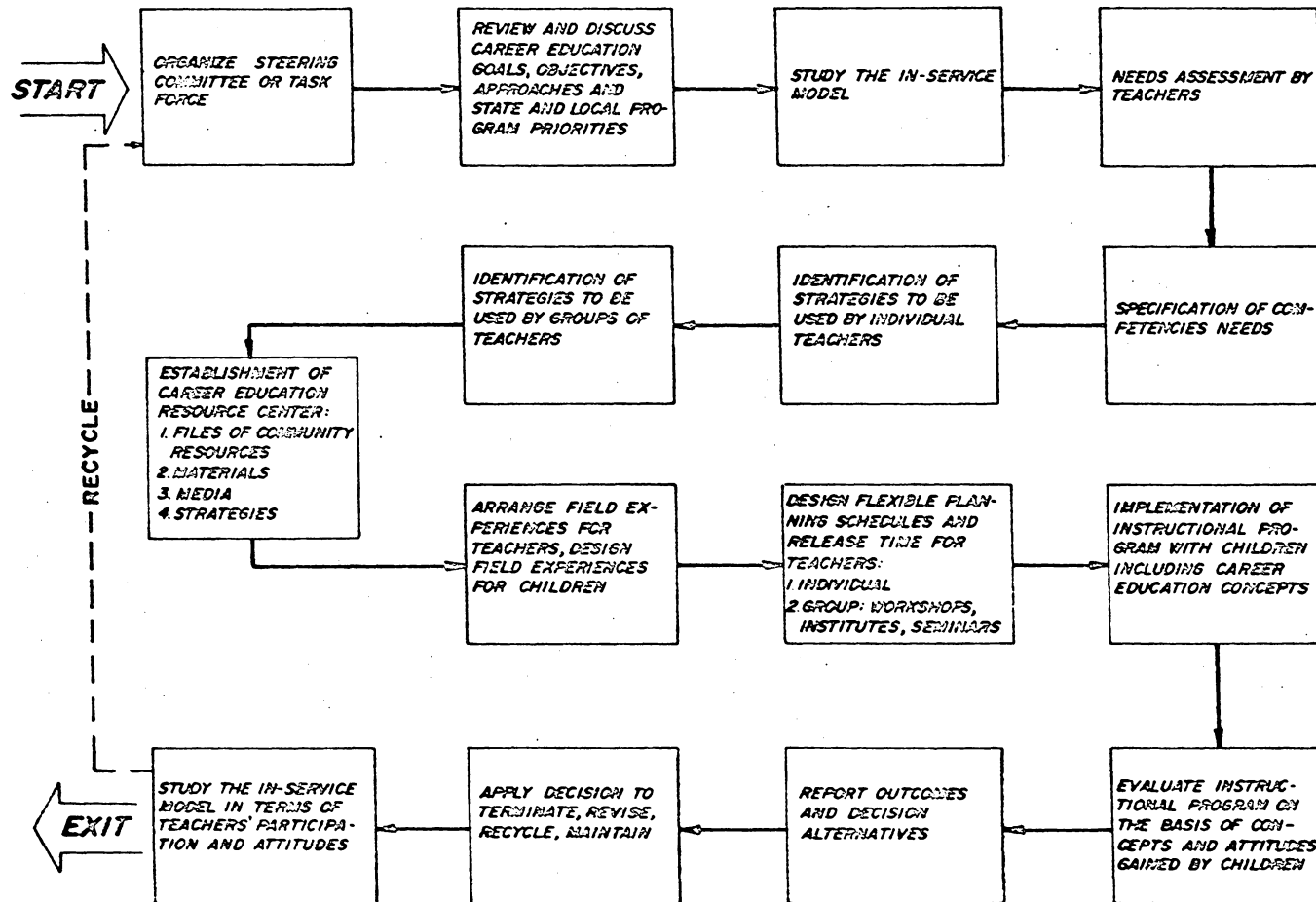
Composition of Validating Panelists By Identification Information

	A N = 15						B N = 15						C N = 14						
	Teacher		Adm.		Total		Teacher		Adm.		Total		Teacher		Adm.		Total		
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
Formal Education:																			
Bachelor's Degree	5	50			5	33	5	50	1	20	6	40	5	50			5	47	
Master's Degree	5	50	3	60	8	53	5	50	3	60	8	53	5	50	3	75	8	56	
6th Year Program			1	20	1	7			1	20	1	7			1	25	1	7	
Doctorate			1	20	1	7													
	<u>10</u>		<u>5</u>		<u>15</u>		<u>10</u>		<u>5</u>		<u>15</u>		<u>10</u>		<u>4</u>		<u>14</u>		
Teaching Experience:																			
One to two years													1	10			1	8	
Three to five years	2	20	1	20	3	20	5	50					3	30	1	25	4	28	
Over five years	8	80	4	80	12	80	5	50	5	100			6	60	3	75	9	64	
	<u>10</u>		<u>5</u>		<u>15</u>		<u>10</u>		<u>5</u>		<u>15</u>		<u>10</u>		<u>4</u>		<u>14</u>		
Involvement in CE Instruction:																			
Yes	5	50	2	40	7	46	8	80	3	60	11	73	8	80	3	75	11	78	
No	5	50	3	60	8	53	2	20	2	40	4	26	2	20	1	25	3	21	
	<u>10</u>		<u>5</u>		<u>15</u>		<u>10</u>		<u>5</u>		<u>15</u>		<u>10</u>		<u>4</u>		<u>14</u>		
Instructional Area:																			
Agriculture																			
Business	2	20	1	20	3	20											2	14	
Health and P.E.	2	20	1	20	3	20	1	10	1	20	2	13	2	20			1	7	
Home Economics									1	20	1	7	1	10			1	7	
Industrial Arts	1	10			1	6	1	10			1	7	1	10			1	7	
Science	2	20			2	4	2	20	2	40	4	26			2	50	2	14	
Math	1	10	1	20	2	4	1	10	1	20	2	13	2	20			2	14	
English	1	10	1	20	1	6							2	20			2	14	
Social Studies	1	10			2	4	1	10			1	7	2	20			1	7	
Music/Art			1	20	1	6									1	25	1	7	
T & I															1	25			
Other																			
Special Ed.																			
Elementary Ed.							4	40			4	26							
	<u>10</u>		<u>5</u>		<u>15</u>		<u>10</u>		<u>5</u>		<u>15</u>		<u>10</u>		<u>4</u>		<u>14</u>		

Table 9 (continued)

	D N = 16				E N = 14				F N = 12				Grand Total													
	Teacher		Adm.		Teacher		Adm.		Teacher		Adm.		Teacher		Adm.											
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%										
Formal Education:																										
Bachelor's Degree	9	90			9	56	4	44			4	28			28	54	1	2	29	34						
Master's Degree	1	10	6	100	7	44	4	44	5	100			1	11	1	8	20	38	21	62	41	48				
6th Year Program							1	11			1	8			2	66	3	33	5	42	3	6	6	18	9	10
Doctorate															5	56	6	18	11	50	1	2	6	18	7	8
	<u>10</u>		<u>6</u>		<u>16</u>		<u>9</u>		<u>5</u>		<u>14</u>		<u>3</u>		<u>9</u>		<u>12</u>		<u>50</u>		<u>52</u>		<u>34</u>		<u>86</u>	
Teaching Experience:																										
One to two years	3	30				19									4	8					4	5				
Three to five years	5	50	1	16	31		1	11	1	8					16	31	3	9	19	22						
Over five years	2	20	5	84	19		8	89	5	100	13	92	3	100	9	100	12	100	32	61	31	91	63	73		
	<u>10</u>		<u>6</u>				<u>9</u>		<u>5</u>		<u>14</u>		<u>3</u>		<u>9</u>		<u>12</u>		<u>52</u>		<u>34</u>		<u>86</u>			
Involvement in CE Instruction:																										
Yes	6	60	5	84	11	69	5	56	5	100	10	72	3	100	2	5			35	67	20	59	55	64		
No	4	40	1	16	5	31	4	44			4	28			7	7			17	33	14	41	31	36		
	<u>10</u>		<u>6</u>		<u>16</u>		<u>9</u>		<u>5</u>		<u>14</u>		<u>3</u>		<u>9</u>		<u>12</u>		<u>52</u>		<u>34</u>		<u>86</u>			
Instructional Area:																										
Agriculture																										
Business			1	16	1	6	1	11	1	20	2	15	1	33	2	22	3	25	4	8	5	15	9	10		
Health and P.E.			1	16	1	6	2	22	1	20	3	21							7	13	4	12	11	13		
Home Economics							1	11							1	11	1	8	1	2	2	6	3	3		
Industrial Arts	1	10	2	34	3	19	3	33			3	21							4	8			4	5		
Science	1	10			1	6	1	11	2	40	3	21							8	15	6	17	14	16		
Math	3	30	1	16	4	25	1	11			1	7							6	11	4	12	10	12		
English	2	20			2	12			1	20	1	7							6	11	4	12	10	12		
Social Studies													2	66	4	44	6	50	8	15	6	18	3	5		
Music/Art																					1	3	1	1		
T & I																										
Other																										
Special Ed.	1	10			1	6													1	2			1	1		
Elementary Ed.	2	20	1	16	3	19													6	11			6	7		
	<u>10</u>		<u>6</u>		<u>16</u>		<u>9</u>		<u>5</u>		<u>14</u>		<u>3</u>		<u>9</u>		<u>12</u>		<u>52</u>		<u>34</u>		<u>86</u>			

APPENDIX D
IN-SERVICE CAREER EDUCATION MODEL



In-Service Career Education Model

MODEL COMPONENTS EXPLANATIONS

1. Study the In-Service Model

Develop an understanding of the approach, its rationale, assumptions, advantages, disadvantages, skills and resources to be employed in its implementation.

2. Organize Steering and Advisory Committees

Form program advisory and planning teams to ensure a career development program that is sensitive to the needs of a total school community. Key individuals--school administrators, guidance and curriculum personnel, as well as students, parents, teachers and community persons--should be involved in program planning at the outset.

3. Review and Discuss Career Development Theory

Development of a comprehensive program and a consistent philosophy and assumptions requires the examination of leading theories of career development (four are suggested, others may be added) and an analysis of one's program and thinking in light of these.

4. Study the Model

Review the model components beginning with the first one, assess accomplishments, decide whether to advance or repeat previous steps.

5. Needs Assessments

(1) Utilize a systematic data gathering process to determine the activities desired for students and teachers from the career education program and corresponding in-service activities.

(2) Assess current status of career education program for students, teachers, felt in-service needs and current resources.

(3) Define and summarize needs, identified resource allocations and pragmatic goals and evaluation criteria and provisions for the career education program.

6. Specification of Competencies

Define and specify behaviors or skills teachers and students are expected to better perform if a goal has been achieved-- a practical set of goals to be addressed through the in-service career education curriculum.

7. Identification of Strategies (Individual)

Move from statement of desired goals and competencies to consideration of means for best reaching these student development goals and teacher competency by defining tasks to be achieved by individual teachers and dates for accomplishment.

8. Identification of Strategies (Group)

Formulate plans of action which define all the things which must be done to ensure that the program is helping teachers to improve attitudes, understandings, knowledge and skills.

9. Establish Career Education Resources

Explore and establish ways to enable staff members to develop their talents and to assist other staff members to make viable contributions to peer and student development.

10. Arrange Field Experiences

Employ field experiences (external to school) through first hand study of work in local business, industrial, governmental and labor establishments--should be scheduled on release time basis, vacation periods, after-school hours and on weekends.

11. Design Flexible Planning Schedule

For improvement of staff competency, release time for planning, developing materials, participating in in-services, conducting student activities within and external to the school is essential, and should be built into the overall school schedule and procedural policies.

12. Implement Instructional Program with Students

Try out activities with students. Monitor feedback mechanism as the program is implemented, conducted and managed to detect and predict problems and to help to make on-going decisions to allow the program to operate as effective as possible.

13. Evaluate In-Service Programs

Communicate feedback data on program implementation, management and assessment; use these results to tailor in-service activities to implied and identified student and teacher needs. Communicate decisions made, data needed activities for design and trajectory and dates for accomplishment.

14. Report Outcomes and Decision Alternatives

Communicate evaluation results, using evaluation results through the use of systematic feedback gathering devices and procedures. Specify the characteristics of the target group, changes, resource needs, recommendations and implications and appropriate responding activities.

15. Apply Decision Alternatives

Examine resources, recommendations, implications and recommended responding activities, experiences and judgements accordingly.

16. Study In-Service Model

Study in-service model in conjunction with data collected pertaining to the impact of program on student and teacher development. Make decisions to maintain and recycle, modify and recycle or terminate specific components and/or program activities.

APPENDIX E
VALIDATION INTERVIEW SCHEDULE

VALIDATION INTERVIEW SCHEDULE

(Middle School Teacher Career Education In-Service Program Model)

Following is an easy to complete interview schedule outlining the breakdown of elements that are proposed for use by teachers in planning, implementing and evaluating teacher generated and conducted in-service career education programs.

Your assistance is needed in determining the adequacy and effectiveness of the proposed process and curricula items in this outline. Please respond as frankly as you can to the questions listed in Sections I, II and III.

The questions in these sections were designed to collect information related to the model. In no way will anyone attempt to use these results to make any judgmental statements about you or anyone else. It is further understood that your participation is voluntary.

SECTION I IDENTIFICATION INFORMATION

Directions: Please complete this schedule by checking (✓) in the appropriate blanks provided with each question.

1. What is the highest level of post-secondary formal education you have completed?

- Bachelor's Degree
- Master's Degree
- 6th Year Program
- Doctorate

2. How many years of teaching experience have you completed?

- None
- One to Two
- Three to Five
- More than Five

3. Have you been involved in a formalized career education instructional program within the last two years?

- Yes
- No

4. What instructional area best describes your undergraduate background?

- | | |
|---|--|
| <ul style="list-style-type: none"> <input type="checkbox"/> Agriculture <input type="checkbox"/> Business, Distributive and Office <input type="checkbox"/> Health and P.E. <input type="checkbox"/> Home Economics <input type="checkbox"/> Industrial Arts <input type="checkbox"/> Science | <ul style="list-style-type: none"> <input type="checkbox"/> Math <input type="checkbox"/> English <input type="checkbox"/> Social Studies <input type="checkbox"/> Music and Fine Arts <input type="checkbox"/> Trade and Industrial Education <input type="checkbox"/> Other _____
Please Specify |
|---|--|

5. Your current assignment:

_____ Position

_____ Subject(s) Taught

_____ Grade Level(s)

SECTION II REACTION TO THE MODEL

Directions: Please respond to each question below by checking (✓) in the appropriate blanks and filling in the comments sections. Additional comments are welcomed on the back.

1. How specific are the procedures as outlined in each component of the model?

Very Specific Comments: _____
 Specific
 Somewhat Specific _____
 Not Specific

2. How important are the components in the model?

Very Important Comments: _____
 Important
 Somewhat Important _____
 Unimportant

3. How complete are the explanatory statements by which the components of the model are described?

Very Complete Comments: _____
 Complete
 Somewhat Complete _____
 Incomplete

4. How relevant are the categories of topics suggested for planning in-service career education programs for classroom teachers (i.e., career development theories, attitudes, knowledges and understandings, and competencies)?

Very Relevant Comments: _____
 Relevant
 Somewhat Relevant _____
 Irrelevant

5. Are there competencies in the model which you would consider eliminating?

Yes If yes, specify which ones: _____
 To Some Extent
 No

SECTION II (continued)

6. To what extent would you be able to follow this model?

Very Extensively Comments: _____
 Extensively
 Somewhat Extensively _____
 Not At All

7. Are the components organized in a logical sequence?

Very Logical Comments: _____
 Logical
 Somewhat Logical _____
 Not Logical

8. How clear are the relations among components?

Very Clear Comments: _____
 Clear
 Somewhat Clear _____
 Unclear

9. Do you understand what a teacher or trainer should do in each of the model components?

Yes Comments: (If no, specify which ones) _____
 To Some Extent
 No

10. Would you consider using this model?

Yes Comments: _____
 To Some Extent
 No

SECTION III OPEN-ENDED FEEDBACK INVENTORY

Directions: With this interview schedule, we solicit your reactions to any aspects of the model that you like or dislike.

1. What did you like most about this model?

- A. _____
- B. _____
- C. _____
- D. _____

2. What did you like least about this model?

- A. _____
- B. _____
- C. _____
- D. _____

3. Any additional comments? Feel free to use the back of the page.

(Please feel free to reiterate points made elsewhere if you desire.)

APPENDIX F

VALIDATION INTERVIEW SCHEDULE
ACTIVITY TIME TABLE

**Validation Interview Schedule
Activity Time Table
Middle School Career Education In-Service Program Model**

<u>Date</u>	<u>Location</u>
10:00 - 11:00 am 3:30 - 4:30 pm	<u>Session</u>
<u>Time</u>	<u>Activities</u>
10:00 - 10:02 3:30 - 3:32	I. Introduction: Purpose and Overview of Validation Activity [Preface on pages iii and iv] Questions and Answers
	II. Presentation (Transparencies)
10:02 - 10:06 3:32 - 3:36	A. Background Materials Evolving a Philosophy for Career Education [10*] Philosophical Foundations for Teacher In-Service [11] Theoretical Implications for Career Education In-Service [22-24]
10:06 - 10:14 3:36 - 3:44	B. Definition - In-Service Career Education [49-59] (Transparencies/Slides)
10:14 - 10:17 3:44 - 3:47	C. Career Education In-Service: A Plan of Action Determining Curriculum [29-37] Specifying Processes [38] Designing a Framework [44-48]
10:17 - 10:37 3:47 - 4:07	D. The Model and Components [60-64]
10:37 - 10:45 4:07 - 4:15	E. Programatic Adaptation: Four Examples [65-66; 67-69; 70-73; 74-76]
10:45 - 11:00 4:15 4:30	III. Reactions to the Model: The Interview Schedule Questions, Answers, and Comments

*Refers to page(s) in the text where the material under discussion is presented.

APPENDIX G
SPECIFIC FUNCTIONS OF INTERVIEWER

Specific Functions of the Interviewer

Prior to Validating Interview Sessions:

1. Study the manuscript thoroughly ahead of time. Be familiar with all materials for participants' reactions and interviewer's role.
2. Check materials to make certain that the following items are on hand and ready for use.

10-15 copies of the Model Framework
 15 copies of the Interview Schedule (of same color code)
 15 pencils
 Transparencies
 Film strip projector
 Overhead projector
 Tape recorder
 Cassette (1 hr. length)
 Timer

3. Set up equipment and arrange work spaces.

At the Interview Session:

1. Introduce self to participants and then to each other. Briefly explain your background and the role you will play in presenting the model.
2. Conduct introductory activity; introduce basic purpose and structure of Model Framework (answer any questions).
3. Start participants on an examination of the text.
4. Lead a discussion and examination of materials using visual aids as you go through selected elements of the Model Framework (i.e., background and application of materials).
5. Conduct the assessment; provide opportunities for written and oral feedback.
6. Conduct wrap-up activity
 - (a) Summarize what has gone on and what has been accomplished
 - (b) Resolve any unanswered questions
 - (c) Ask for additional topics, resources, and technical assistance
7. Throughout, observe how things go; collect suggestions for ways to improve the Model Framework; keep a written account or tape recording of these.
8. Make proper comments.

APPENDIX H

A MODEL FRAMEWORK FOR TEACHER
IN-SERVICE PROGRAMS

BLENDING CAREER EDUCATION INTO THE MIDDLE SCHOOL INSTRUCTIONAL PROGRAM:
A MODEL FRAMEWORK FOR TEACHER IN-SERVICE PROGRAMS

* *

RUTH SWANN

* *

COLLEGE OF EDUCATION
VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

1976

ORIENTATION QUESTIONS

WHAT IS IN-SERVICE CAREER EDUCATION?

WHAT ARE THE EXPECTED OUTCOMES OF IN-SERVICE CAREER EDUCATION?

WHAT ARE THE FUNCTIONAL COMPONENTS OF IN-SERVICE CAREER EDUCATION PROGRAMS?

WHAT ARE THE TEACHING/LEARNING STRATEGIES?

WHAT IS THE DELIVERY SYSTEM?

WHAT ARE THE OPERATIONAL TERMS IN THE CAREER EDUCATIONAL PHILOSOPHY?

WHAT APPROACHES CAN BE USED TO INITIATE AN IN-SERVICE CAREER EDUCATION PROGRAM?

WHAT ARE THE INDICATORS OF A VIABLE CAREER EDUCATION IN-SERVICE PROGRAM?

PREFACE

In the spring of 1975, the writer formed an advisory committee to guide the development of a model framework for establishing and strengthening in-service career education programs for middle school teachers. During the ensuing months a preliminary model was developed through a review, analysis and synthesis of relevant literature and research findings and interviews with counselors, teachers and career education experts. In January of 1976, a draft of the model framework was offered for testing and recommendations to five school districts in the Commonwealth of Virginia. Based upon the reactions and recommendations of career education practitioners who studied and validated the materials in school settings and staff meetings, this final product is presented.

The ultimate goal of the research and development effort was to construct a model in-service framework for preparing classroom teachers to blend career education concepts into the middle school curriculum. The objective of the model is to provide information which will help educational personnel:

1. Increase their understanding of the career development roles of teachers in a viable career education delivery system.

2. Increase their concern with helping classroom teachers translate student needs and societal needs into a meaningful curriculum based on futuristic human developmental and social needs.

3. Increase their awareness of the need for in-service career education programs.

4. Increase their knowledge of pedagogical career development competency needs.

5. Increase their knowledge of strategies for the design, implementation and strengthening of career education programs in middle schools.

6. Increase their abilities to select, develop and utilize career education content, concepts and skills in classroom instructional programs.

7. Increase their understanding and skills in assessing needs, developing goals and objectives and designing curriculum and teaching/learning strategies for in-service career education tailored to their unique professional needs.

ACKNOWLEDGEMENTS

The writer wishes to thank the members of the research advisory committee, the validating panel of experts and the Departments of Guidance and Instruction, State Department of Education, Commonwealth of Virginia, for assistance rendered in making this pioneering contribution to in-service teacher career preparation possible.

Grateful acknowledgement is made of the use of funds derived from the National Scholarships Fund for undertaking the research which went into the development of this model.

In addition, indebtedness is acknowledged to the illustrators, Beulah Prestrude and Ralph Horne, and to the typist, Wanda Smith, for wholehearted assistance and prompt fulfillment of commitments.

Appreciation is also extended to numerous friends, neighbors and colleagues who critiqued the model and supported the research effort.

It is sincerely hoped that this product will spur the development of effective career education in-service programs throughout the Commonwealth of Virginia and elsewhere.

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INTRODUCTION

INTRODUCTION

Career education is the implementation of various elements of the career development concept into the total educational system. The press for its implementation into the school program, which has come from governmental officials and educators, has given the concept definition, direction, momentum and operational status.

A most helpful definition, developed by Hoyt and others, of the career education concept describes:

. . . career education as the total effort of public education and the community aimed at helping all individuals to become familiar with the values of a work-oriented society, to integrate these values into their personal value systems, and to implement these values into their personal lives in such a way that work becomes possible, meaningful and satisfying to each individual (Hoyt, Evans, Macklin, and Mangum, 1972:1).

Career education's challenge, scope and likely impact on the development of human potential was described by Bruner in these words:

Education has failed to respond to the changing social need. In effect our educational system is our way of maintaining a class system . . . a group at the bottom. Education should de-emphasize the structure of knowledge, and deal with it in the context of the problems that face us. We might put vocations and intention back into the process of education (Bruner, 1971: 20).

Acceptance of the task of putting vocations and intention back into the process of education demands that educators address the elements which are vital to the design, implementation, development and management of curricula which provide students opportunities to achieve their full potentials. Inherent in this

assignment is an instructional imperative which challenges educators, schools and school systems to undertake the development of conceptually sound career education programs. This instructional imperative requires the manifestation of concordant elements of concern, conceptualization, conduct, consideration, competency and commitment illustrated in Figure 1.

Any school or school system undertaking the development of a career education program will quickly discover the need for in-service education for teachers and administrators. Traditionally, teacher preparation programs have not provided for the development of attitudes, knowledge and understandings, and skills needed for blending the new concept of career education into the curriculum. In recognition of this reality, this handbook is designed to present a model framework which may be used as a guide for implementing an in-service career education program for middle school teachers.

This model is directed to teachers and administrators. It identifies the competencies needed by teachers, strategies for competency development, concepts to be developed by pupils, avenues for parental, community, government and industry participation, procedures for the involvement of higher education institutions, professional and social organizations and agencies, and evaluation procedures and resources.

This model is based on the idea that teachers must be actively involved in designing, implementing and evaluating in-service programs which speak directly to the role of the instructional program and the responsibilities of the classroom teacher in career development.

Instructional Imperatives For Professional
Development (Staff/Self)
The Career Sextet

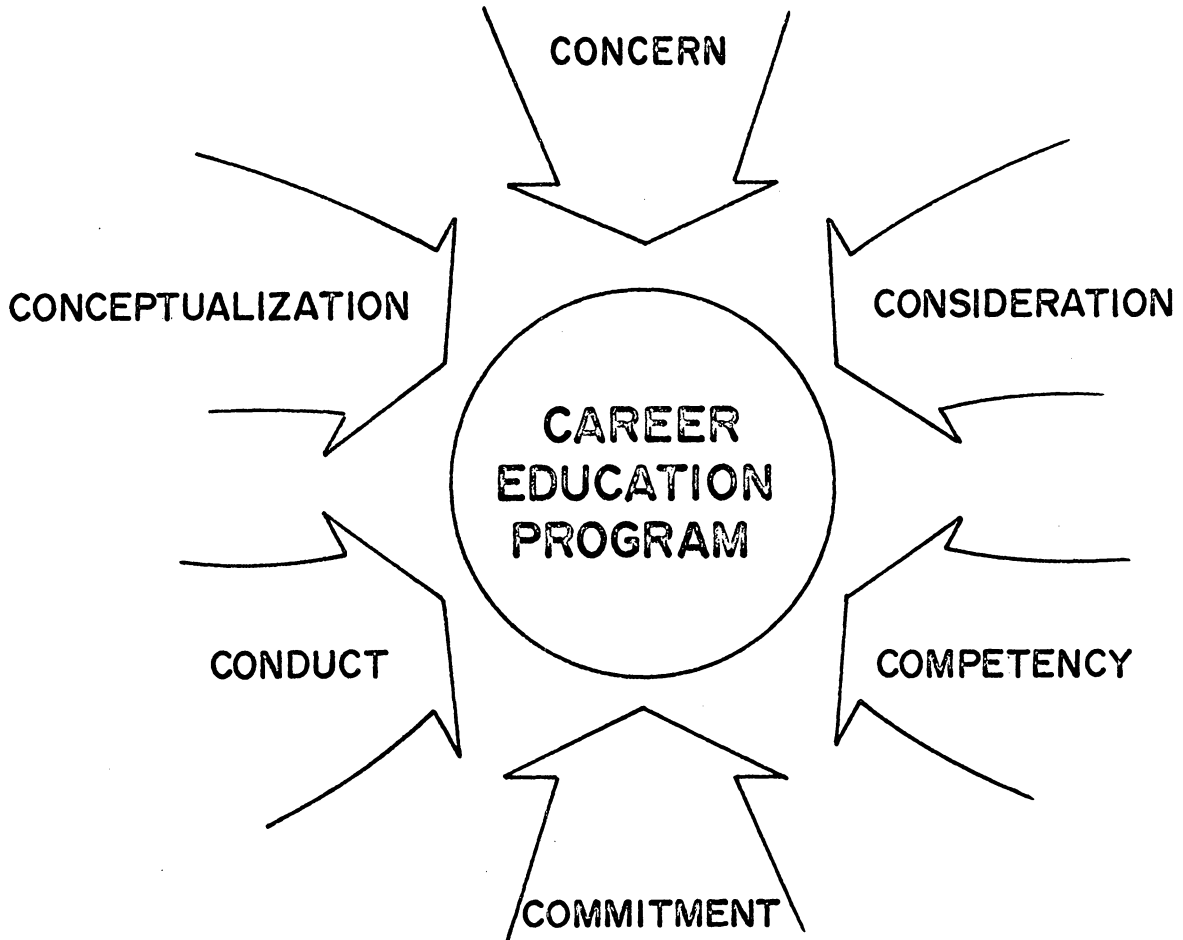


Figure 1

Corresponding Constituents

CONCEPTS FOR MIDDLE SCHOOL CAREER EDUCATION

The concepts of career education are particularly relevant for middle school youth. Research has shown that the middle school years are crucial in the development of an individual. Interesting, exciting and perplexing things are happening to these youths physically, socially, sexually, emotionally and mentally. These students, according to Super and Overstreet (1960), Gribbons and Lohnes (1968) and McDaniels (1968), need and desire help in understanding and guiding these developments and in understanding their implications for future developmental tasks and stages or periods of maturational crisis.

The concepts of career education which focus on the developmental needs of youth in grades 4-9 (ages 11-15) are particularly applicable to the instructional endeavors of middle school teachers. The concepts of career development at this level focus upon increasing awareness, exploration, understanding and motivation. It is exceedingly important that middle school youth as a normal part of their educational process be appropriately involved in activities and programs designed to develop: (1) greater awareness and knowledge of self, opportunities and work; (2) positive attitudes toward work and proper work habits; (3) increased interest in the "whys" and "hows" of education and occupational planning; (4) appropriate balance between self, current decision and future career aspirations; and (5) greater awareness of techniques for appraising individual abilities, interest, needs and potentials.

FOUNDATIONS FOR TEACHER IN-SERVICE
PROGRAM MODELS

THE RATIONALE: WHY AN IN-SERVICE MODEL
FOR MIDDLE SCHOOLS?

Justification for middle school teacher in-service programs can be found in the pre-adolescent needs studies conducted by Super and Overstreet (1960), the career pattern studies made by Gibbons and Lohnes (1968) and the research findings of Bottoms (1969, 1971) and Hoyt (1969, 1973).

The works of these authors suggest that the middle school level is a most needy area for concentrated study and critical examination of educational programs and projected needs in light of the potential contributions of career education.

According to Bottoms (1971), considerable efforts have been made over periods of time antedating the current career education thrust to establish career development programs designed to accomplish objectives corresponding to identified developmental needs, tasks and desires of middle school youth.

In reviewing the more prevalent reasons for weak or non-existing programs, Hoyt (1969) cited several factors. They are:

1. There have been no clear-cut goals for career development programs for middle school youth.
2. Teachers were not properly trained and prepared to teach career education nor to infuse career education into ongoing curricula.
3. Teachers have not been committed to a total program of career awareness, exploration or development.

4. Career development activities have been viewed by educators as a second rate curriculum experience.

5. There has been a lack of suitable materials and experience to use in career development instructional activities.

6. The teaching methodology has not presented the content of most courses in a meaningful form.

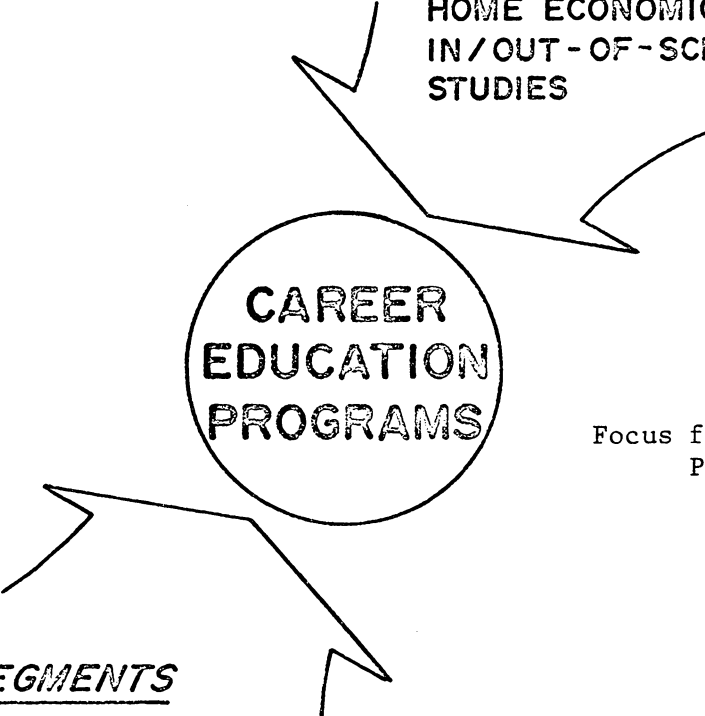
7. Expressions and development of personal characteristics important to career development have been limited.

The generalizations presented here: (1) account for failures of past programs; (2) address operational concerns for middle school career development programs for students and teachers; and (3) support the need for developing structures to blend career education into the middle school curriculum via teacher in-service.

The development of appropriate structures for developing viable career education programs for students and teachers requires a coordinated effort of all segments of the school and community. Figure 2 attempts to convey the idea that career education is a concept in education with an interdepending school and community relationship--one which involves the fabrics of the inner and outer environments of the process of education.

SCHOOL SEGMENTS

ART • CAREER RESOURCE CENTER • MATH
GUIDANCE CENTER • ENGLISH • SCIENCE •
MUSIC • BUSINESS • INDUSTRIAL ARTS •
HOME ECONOMICS • PHYSICAL EDUCATION •
IN/OUT-OF-SCHOOL ACTIVITIES • SOCIAL
STUDIES



CAREER
EDUCATION
PROGRAMS

Figure 2

Focus for Career Education
Program Blends

COMMUNITY SEGMENTS

HIGHER EDUCATION • PROFESSIONAL GROUPS •
INDUSTRY • CIVIC AND SOCIAL ORGANIZATIONS
BUSINESS • RECREATION AND LEISURE •
LABOR • PARENTS • GOVERNMENT

In attempting to use the new career education concepts to overcome failures of past career development programs, in-service education for middle school teachers appears to be a feasible approach. This approach necessitates the development of a framework for developing operational principles for middle/junior high school career development programs and corresponding principles for the middle school teacher in-service. Therefore, attention should be given to the development of models which provide for an across the board:

1. Needs assessment program for students and teachers based on sound theoretical career development theory and relevant career education concepts.

2. Participation of teachers and students in experiences and activities necessary to aid in the clarification, differentiation and application of the elements of career development appropriate to instruction and/or learning levels.

3. Sets of experiences through which teachers and students acquire a greater understanding of the use of self understanding and appreciation in relationship to the several dimensions of career development.

4. Utilization of simulated and/or concrete experiences for career roles exploration.

5. Personalization of concrete experiences in terms of trajectory paths unfolding intentions and relevant responding behavior.

6. Maximization of potential for each learner (teacher and student) to succeed in learning with their own uniqueness in learning through teacher-designed and operative in and out of school experiences.

7. Exploitation of career implications of each curricular area and the related disciplines.

8. Commitment by educational personnel and students to respecting the dignity of all learning, work and individuals.

9. Blending of counseling and guidance experience with career developmental concepts and the acquisition of tools for thinking, learning and developing physical, leisure, educational and work options.

EVOLVING A PHILOSOPHY FOR CAREER EDUCATION

A rational point of view for school-centered career education programs for students and teachers can be best achieved through a study of the inter-relatedness of the following terms:

1. "Work": "Work" is conscious effort aimed at producing benefits for oneself and/or for others. . . . It is centered around the basic human need for accomplishment and the broader societal survival need for productivity. . . . It is a concept which, while obviously encompassing economic man, goes beyond this to the broader aspects of productivity in one's total life style. Work values are a part of human values. To isolate one's work from other interests, values, decisions and activities is to dichotomize a person's life.
2. "Leisure": "Leisure" consists of relatively self determined activities and experiences which are available due to having discretionary income, time and social behavior. May be physical activities, intellectual activities, volunteer activities, creative activities or a combination of these activities.
3. "Career": "Career" means much more than one's job or occupation. It is a "lifestyle" concept which also involves a sequence of occupations or occupational-related activity in which one engages.
4. "Career Development": "Career Development" is a part of human development. As a person develops from stage to stage, the awareness, exploration, motivation and preparation for particular careers are a major part of total life development.
5. "Career Education": "Career Education" is an educational program which attempts to provide all persons (K-Adult) with knowledge about the world of work and about themselves and the impact of situation factors, so they can make rational career decisions and seek occupational training programs to implement those decisions.

In the development of a sound career education philosophy attention should be given to establishing parameters for a comprehensive program. To provide guidance for developing appropriate guidelines a set of characteristics describing a comprehensive career education program for middle schools is provided on the following page.

CHARACTERISTICS OF A COMPREHENSIVE MIDDLE/JUNIOR
HIGH SCHOOL CAREER DEVELOPMENT PROGRAM*

1. The program is designed to meet needs of all students (Grades 4-9).
2. It is sequential, building on career development tasks at preceding and current grade levels.
3. Career development is blended into the total curriculum.
4. Behavioral goals and learning experiences are designed for each of the seven dimensions of career development.
5. Students are exposed to a broad spectrum of the world of work.
6. Provision is made for: (a) occupational experiences in the work world; (b) informational experiences to permit focus on career clusters; and (c) experiences to facilitate career exploration and motivation relative to self, education and work.
7. Leadership is identified and coordination of teacher efforts provided.
8. Provision is made for in-service education designed to orient teachers to: (a) career development, (b) the business and industrial world, (c) career education content, (d) materials and instructional strategies, and (e) alternative avenues for job preparation.

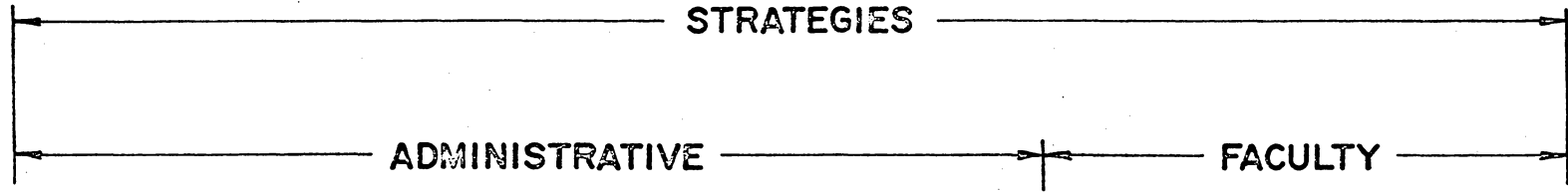
*Portions of the characteristics were drawn from "Characteristics of a Comprehensive High School Career Development Program," compiled by Hansen, Tennysen, and Klaurens, Project TECE, University of Minnesota, September, 1973.

PHILOSOPHICAL FOUNDATIONS FOR TEACHER
IN-SERVICE PROGRAM MODEL

For the purposes of this model, career education in-service is predicated upon the assumptions that teachers:

1. Have the capacity for self-direction and change.
2. Can become independent yet accountable, rational yet effective, developers of career development needs and competency assessment data.
3. Can convert needs and competency assessment data to functional levels of awareness and creative program blends (accommodations).
4. Can, as rational participatory developers of career education curricula, be expected to address the attainment of pre-established goals.
5. Will see the value of developing evaluation strategies on the basis of transportability, practicality, utilization and outcomes.
6. Can effectively use decision criteria in developing, installing, managing, evaluating and recommending: modification, recycling and/or elimination of program components, strategies and procedures.

The application of these principles is illustrated in Figure 3.



DELEGATES

- AUTHORITY
- RESPONSIBILITY

SUPPORT

- RELEASE TIME
- FREEDOM
- PROGRAM INTERPRETATION
- CONSULTANTS
- FLEXIBLE SCHEDULE
- RESOURCES

ESTABLISH

- TEACHER GENERATED
IN-SERVICE ED

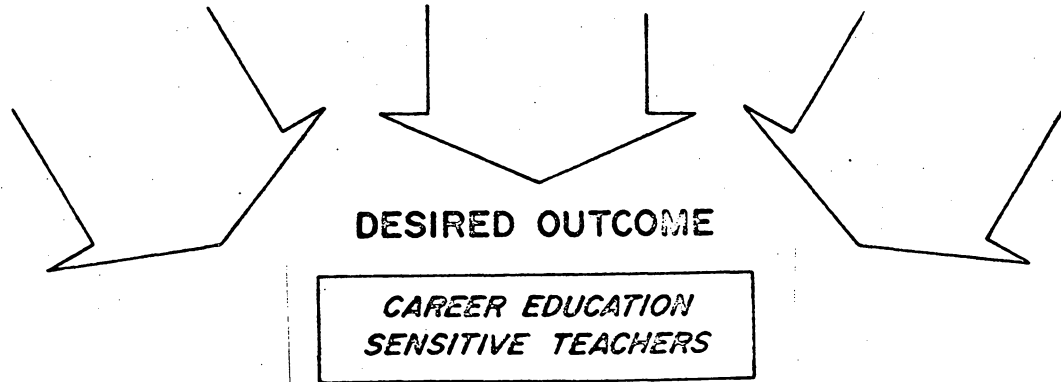


Figure 3

Philosophical Model for Implementing Career Education In-Service

THEORETICAL FOUNDATION FOR THE MODEL

Career development is premised upon the concept of life development as an inter-to-outer unfolding of potentialities. This assumption would assign education the role of helping students to identify that which is "there" in miniature and to aid the students in "settling" themselves in a related trajectory path preparatory to the "unfolding" of the indicated developmental curve.

A careful study of the four career development theories leads to the conclusion that career developmental concepts can provide the theoretical foundations by which a model framework can be constructed for preparing middle school teachers to blend career education into the curriculum.

Ultimately, career development theory can become the lens in the "career education telescope" through which educators identify salient elements in the curriculum which have direct influence on self development through education, work and leisure.

The trait factor theory attempted a matching of the individual's characteristics with occupational opportunities. The sociological theories focused on the development of techniques to cope with environmental factors which affect choice. The developmental theories included the approach of comparing an individual's self concept to his concept of the occupational world, which

was similar to the trait factor. This approach differed from the trait factor approach in that it featured choice as a developmental process extending throughout a lifetime, rather than a point-in-time behavior. The personality theories expressed a point of view which differs from the explanations featured in the other three approaches. In the personality theories, career choice is viewed as the development of a need-satisfaction pattern through a series of choices. The individual's perception of his needs and of the need satisfying potentials of certain occupations, and his opportunities for entry and success, ultimately influence his choice. The occupational choice, job preparation and entry behavior are viewed as expressions of the individual's personality.

A synthesis of the theoretical approaches to career development and in-school education are shown in Figures 4 and 5*, including:

1. Trait factor theories
2. Sociological theories
3. Developmental theories
4. Personality theories

These theories present important concepts by which a viable theory for career development for in-service teacher education programs can be evolved. A discussion follows of eight concepts drawn from these theories which can be used in the development of a workable theory.

*Adapted from "Commonalities of Theoretical Approaches to Occupational Choice," Osipow, 1968.

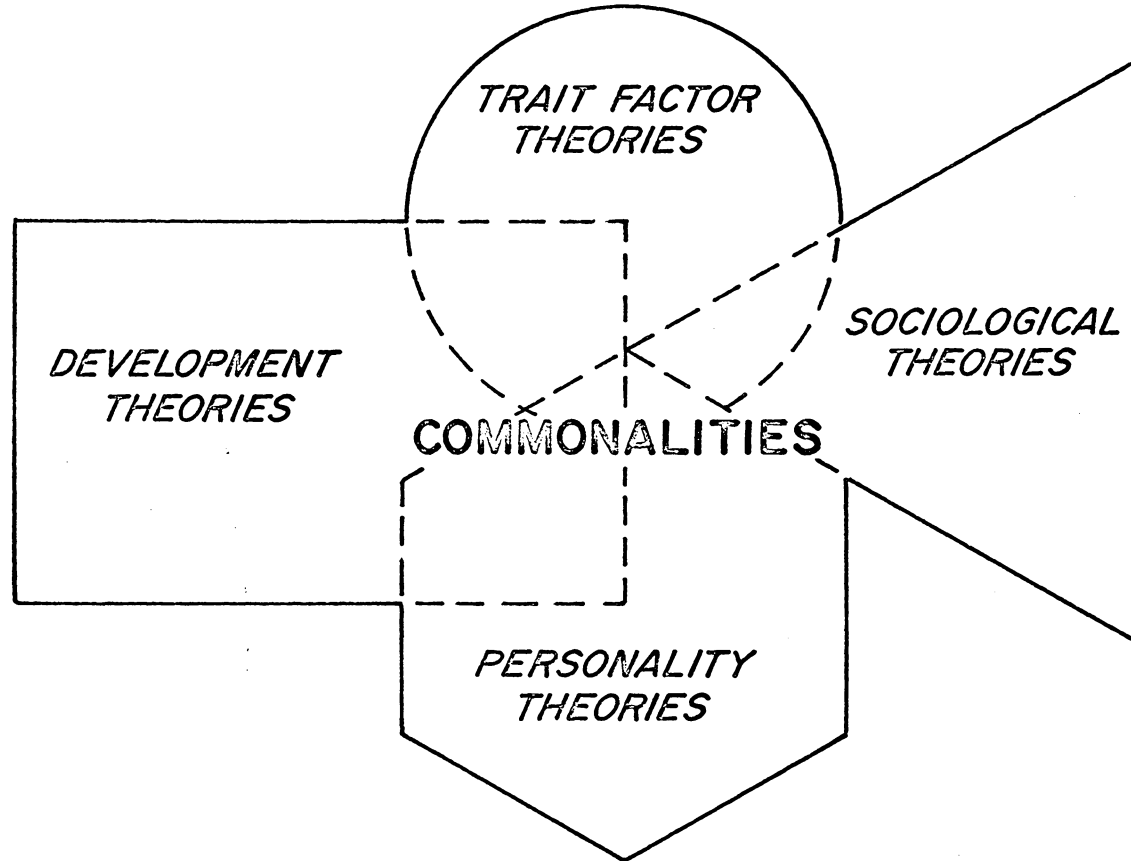


Figure 4

Illustration of the Commonalities in Theoretical Approaches to Occupational Choice

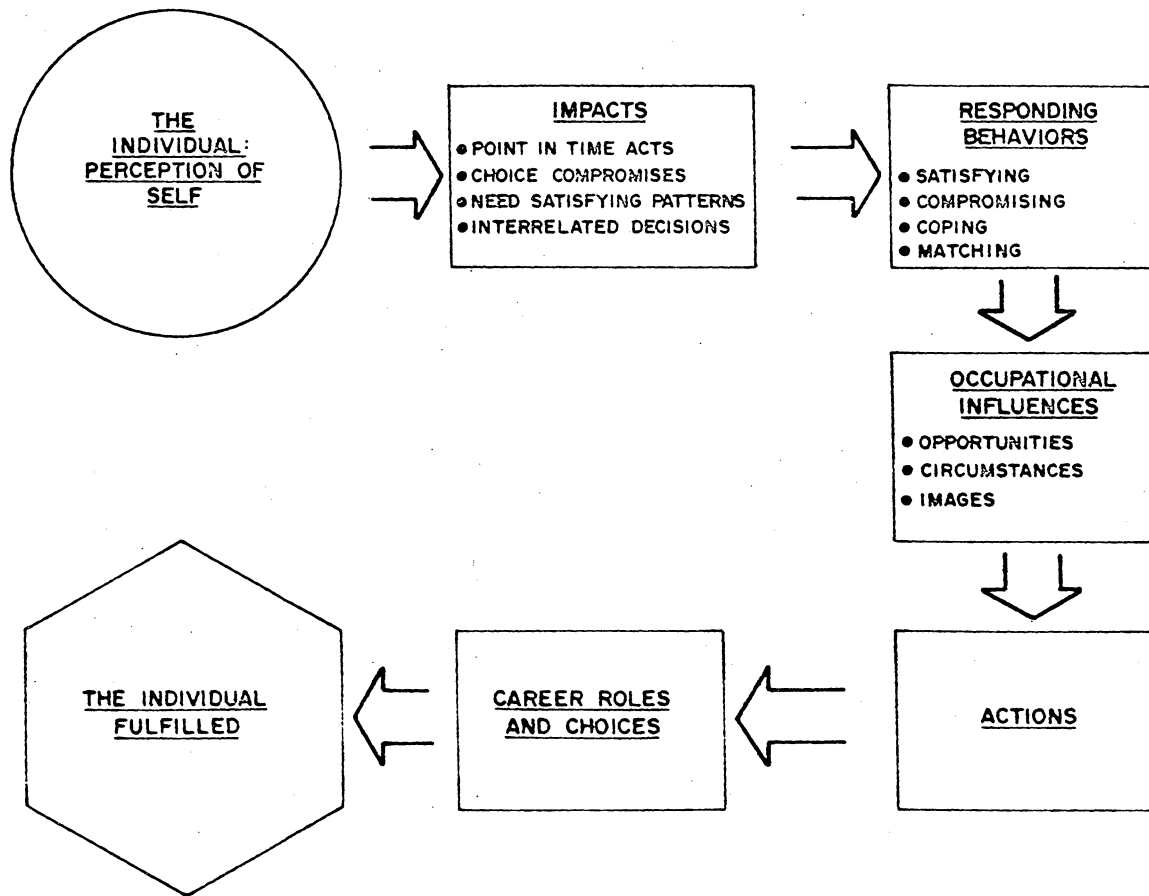


Figure 5

Synthesis of Career Developmental Influences

THEORETICAL ELEMENTS FOR BRINGING VITALITY
TO CAREER EDUCATION

1. The Role of Work in a Person's Life

Work provides a means of meeting a person's economic, social and psychological needs among which are needs for gainful employment, social interactions, personal dignity, identification and human relationships. In view of the prevalence of alienation, characterized by difficulties in seeing oneself positively and constructively as a part of the work-world, it seems apparent that many individuals have not been assisted to view work as having personal relevance, as being critical to the way of life they will exhibit, or as being a consistent vehicle for finding self-fulfillment (Herr, 1972).

Career development, then, offers education the challenge of providing youth with the base of information and theoretical speculation from occupational sociology, developmental psychology, vocational psychology, decision theory and information theory which cast light on the factors that facilitate or impede individual aspirations and plans of action leading to placement in the labor market and the development of a satiating vocational identity.

2. The Relationship of Self Concept to Career Development

A strong inter-relationship and inter-dependence is postulated as existing between a person's behavior in pursuing a career and in their development of attitudes and personal beliefs. The process of career development is a continuing differentiating ego identity as it is formed from experiences and interactions.

It is assumed that the accuracy and comprehensiveness of data about one's self should correspondingly enhance the career decision-making process. Thus it is conceived that through appropriate intervention strategies within the educational process, individuals can develop and use skills for learning about themselves, and for subjecting hypotheses about the self to reality testing under supervision.

3. The Role of Training and Information To Career Choice

Occupational information systems should focus upon the complete career guidance process by incorporating information about self, encouraging pre-vocational exploratory experiences and/or occupational training and planning in conjunction with the use of information.

One of the major stages of career decision making is reality testing. By providing varied work experiences to large numbers of students, the reality testing process can occur prior to entering the world of work and thus facilitate the integration of occupational and self information into the decision making process.

4. The Role of Vocational Maturity

Attempts must be made to identify the elements which make up career maturity and to build educational experiences around them. The developmental task concept describes a set of demands or requirements with which average individuals must cope as well as a way of looking at how given individuals are attaining such expectations wherein they are having difficulty, what specific competence they need to acquire and what resources might be committed to their needs.

Such a concept permits a sequential development of experiences which relate to the emergence of patterns for mastering developmental tasks and the achievement of higher levels of vocational maturity in educational endeavors.

5. The Stages of Decision Making: Occupational Choice Process

A view of decision making stages and career development must be envisioned in relationship to interests, choice and development within the structure of decision making. Within the educational context students must be helped to understand that each decision represents a discrete change in the condition of the decision and the quality of decisions at one stage may be different from one in an earlier stage. In other words, complete changes may take place. The process involves advance and retreat and is described by Williamson as ejective points along the life course.

6. The Impact of Change on Career Decisions

Jobs are constantly changing in their nature and requirements. Old career sequences are no longer valid. Experience has come to have less significant permanent value as function and attributes of jobs are redefined.

In speaking to this point, the National Advisory Council on Vocational Education (1972) states:

. . . because of the increasingly rapid changes in the nature of occupations, in skill levels required for job entry, and changes in work values, youth must be told that their prime goal must be one of adaptability--of being able and ready to change with change. We should assure them that, on the average, they may expect to change occupations somewhere between five and seven times during their work life.

7. The Role of Socio-economic and Roe Level on Occupational Aspirations

Roe hypothesized that warm climates of relationships between parent and child generate needs, attitudes and interests that find expression in occupational life in terms of primary interest in self, in persons, or in non-persons. She claims that occupational choices and work relationships are generated by needs, which may be due to socio-economic background and intelligence, the level at which mature occupational life sets in and the position within that level which the individual attains.

It is possible that in many instances, associations, hobbies or some other aspects of life may serve the same purpose as an occupation in terms of a focus for attitudes, capacities and interests.

8. The Role of Leisure

Current predictions are that as an outgrowth of a computerized age in which 2 percent of the population will be able to produce all goods and food that the other 98 percent can possibly consume, leisure will replace work as man's most time-consuming activity (Gordon and Wilkerson, 1966). The keeping of the 98 percent of the population occupied and solvent is a problem which has strong implications for career development and education in general.

Currently most Americans are only prepared to absorb leisure in any but the smallest denominators. Therefore, our formal training

must be geared toward helping children, youth and adults develop:

- (1) the proper philosophic attitude toward the role of leisure in man's life;
- (2) avocational interests and recreation skills;
- (3) competencies for creative and wise use of leisure; and
- (4) skills for self-management in the pursuit of pleasure.

In summary, these eight elements contribute to the writer's concept of a viable theory of career development for teacher in-service career education:

1. The role of work in a person's life.
2. The relationship of self concept to career development.
3. The role of training and information to career choice.
4. The role of vocational maturity.
5. The stages of decision making: occupational choice process.
6. The impact of change on career decisions.
7. The role of socio-economic and Roe level on occupational aspirations.
8. The role of leisure.

IMPLICATIONS OF CAREER EDUCATION THEORIES FOR
TEACHER IN-SERVICE EDUCATION

The successful implementation of career education programs depends upon administrative support and teacher endorsement. Hoyt (1973) points out the fact that teacher endorsement of career education depends upon the extent to which it corresponds to teachers' perceptions of student welfare and their own professional identities. Teacher resistance will be directly related to the extent to which teachers themselves are involved in meaningful ways in the development and testing of career education concepts and strategies as they relate to the goals of education as perceived by teachers.

Teachers must be actively involved in designing, implementing and evaluating in-service programs which speak directly to the role of the instructional program and the responsibilities of the classroom teacher in career development. In delineating the topics to be considered in defining teachers' responsibilities, the following should be given prime consideration:

1. Assessing needs.
2. Commitment to career education goals.
3. Curriculum development.
4. Helping students to develop self, occupational and educational awareness.

5. Adapting ideas from other teachers and models.
6. Assuming leadership for in-service programs for

teachers.

It is assumed that the delineation of these areas of concern would lead to the establishment of foci for designing activities to help in-service teachers meet the career developmental needs of their students. It is conceived that the foci would include such areas as:

1. Documenting the need for career education.
2. Explicating the career education concept.
3. Providing information about business, industry and labor.
4. Identifying sources of information and implementation strategies.
5. Demonstrating teaching and resource utilization skills.
6. Developing guidance and counseling skills.
7. Implementing action research and assessment strategies.

IMPLICATIONS OF CAREER EDUCATION THEORIES FOR
SELF DEVELOPMENT OF TEACHERS

Many teachers will need to initiate their own programs of self-development in the area of career education. They must learn to integrate the academic, the occupational information, the self discovery data and the work environmental system phenomena into the teaching-learning phenomena.

A systematic approach to the development and utilization of intervention strategies in teachers' classrooms should yield a substantial amount of teacher designed career developmental materials and activities. These materials could be used to illustrate differential vocational behavior and provide decision making experience as well as to facilitate the career development process.

One technique which teachers may use to give students practice in displaying appropriate behaviors and developing alternate strategies is simulation. Miller and Leonard (1975) have advocated the use of simulation to allow students the opportunity to experience situations similar to real life, to try out behaviors and to receive feedback on the results of their behavior.

By engaging in classroom research projects, in-service teachers may enhance their abilities to identify the career development needs of their students, define their goals and discover more creative and tested solutions to the problem of facilitating student career development through their content area.

THE IN-SERVICE CURRICULUM

THE IN-SERVICE CURRICULUM

Rationale

Historically, curriculum for in-service teacher education has reflected the needs of society. As society has changed, the focus of teacher in-service education has also changed to meet the needs. The new thrust for career education has followed this traditional pattern. However, in many educational settings changes in in-service curricula, to facilitate career education blending strategies in in-service curricular, have lagged behind society's needs; and desire for such changes has now become evident.

According to repeated verbalizations of government officials, national professional organizations and prominent educators, a number of contemporary factors necessitate changes in the education of teachers and students. Included among these factors are:

1. Today's knowledge explosion.
2. The growing tightening of the job market.
3. The increased demand for workers with specialized skills.
4. The civil rights movement.
5. Ways of developing leisure-coping interests and skills.

Consequently, education at all levels must become more adept in presenting information that is especially relevant to helping learners develop the awareness, attitudes, understandings, values and skills which will help them to prepare for, obtain and maintain employment in an ever-changing industrialized society.

Current professional literature point out that far too many educators are clinging to traditional methods of instruction and curriculum content. The literature advocate preparing teachers to use (newer) approaches and content to involve students in career developmental activities. Guidelines advocated for developing, selecting and utilizing career education content and methods suggest that the instructional activities stimulate interest in the subject matter as it relates to life roles; involve students in sensitizing, exploratory and motivational learning experiences; and help prepare students to meet changing personal, leisure, career and societal needs and industrial demands. Consequently, instruction in each subject matter area would focus on blending relevant aspects of self-awareness/exploration/and motivation, life career roles, understandings, and world of work knowledge into curriculum structures and on-going instructional program components.

Conceptual Framework

Effective blending of career education into the on-going curriculum of the middle school requires the revisions of some

segments of the curriculum. Career education should be viewed as an integral part of the curriculum rather than as a separate add-on to the already crowded curriculum. Blending of career education into the curriculum requires a needs assessment of skills, understandings and knowledge teachers already have and a priority listing of competencies to be developed.

Although there is no set or clearly defined curriculum, the major concepts of career education should be identified and blended into the regular classroom curriculum. Career education concepts have been described by the Center for Vocational and Technical Education, The Ohio State University (1972), in terms of experiences through which corresponding behavioral patterns occur. The Center structured the stages of career development beginning with awareness and progressing through stages of accommodation, orientation, exploration and motivation to preparatory stages. Thus, developmentally, career education concepts which are important to middle grades can be featured as in Figure 6.

Educational concepts which are important to the career development of middle school youth and the in-service needs of their teachers were featured by Overly, Kingshorn, and Preston (1972) in terms of the unique problems of middle school youth and the corresponding responsibilities of their teachers. These concepts, according to the authors, can be used to provide substantive content for teacher in-service, curriculum, and classroom instruction. These problems and responsibilities appear in Appendix A.

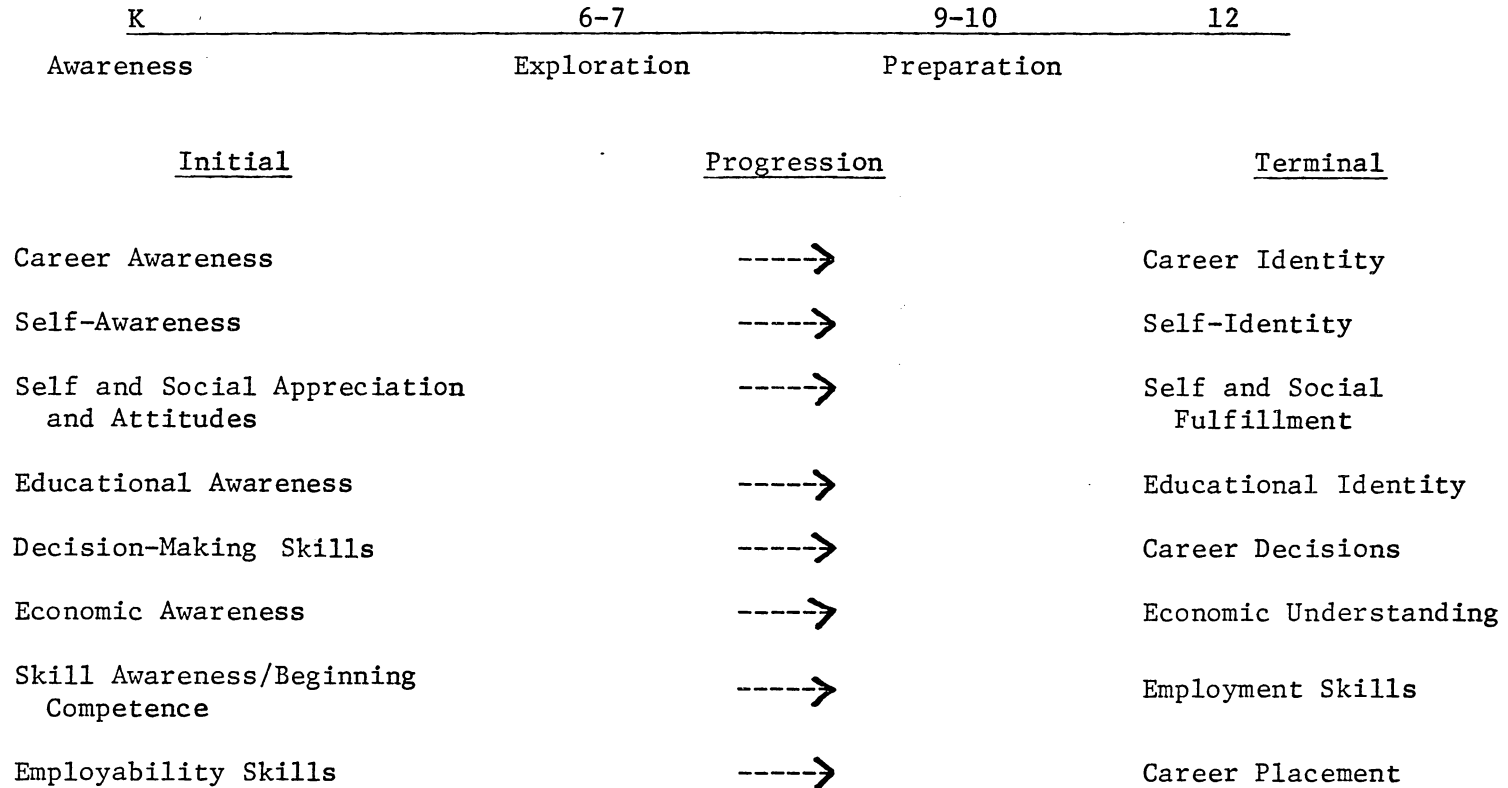


Figure 6
Concepts of Career Education

In order to blend these career education concepts into the middle school curriculum teachers need specific competencies relating to career education. These competencies may be classified in the following ways:

A. Attitudes toward:

1. Career education
2. The work ethic
3. Role of classroom teacher in career education
4. Dignity of work
5. The self
6. Human potentiality development
7. Occupation as determinant of life style

B. Knowledge and understandings of:

1. Theoretical aspect of career development
2. Structure of work
3. Career development needs of middle school youth
4. Implication of substantive content taught for career development
5. Relationship of career education concepts to human development and instructional strategies
6. Action-research and evaluation processes

C. Behaviors or skills categories

1. Instructional blending skills
2. Teaming skills
3. Utilizing community resources
4. Professional development skills
5. Action-research and evaluation skills

IMPORTANT ATTITUDES FOR A SUCCESSFUL
CAREER EDUCATION PROGRAM

1. Believes that all teachers at all levels of education should emphasize the career implications of the substantial content they seek to help students learn.

2. Thinks that any class may be vocational skill training for one or more of its students and that the teacher has special responsibilities to such students.

3. Desires to increase personal knowledge of the world of work through observation, work experiences and instruction that takes place in the business, labor and industrial community.

4. Believes that teachers should help all students acquire a personally meaningful set of work values and a basis for making reasoned career decisions.

5. Feels that teachers should help parents develop and apply career education concepts that will serve as positive rather than negative forces in the career development of their children.

6. Views education as preparation for work and as an important goal of all who teach and all who learn.

7. Believes in the importance of adaptability on the part of all individuals.

8. Believes that there will be instances when career education concepts can be appropriately blended into the instructional content.

9. Views the production of goals and service as useful to individuals and society.

10. Believes that work is a necessary and vital force in American society.

11. Shows appreciation for work as a valued and enduring social institution ("work" broadly conceived).

12. Displays acceptance of the responsibility for one's vocational planning and development.

13. Views knowledge of educational and vocational resources as valuable professional tools.

14. Indicates understanding and acceptance of significant data about self.

15. Demonstrates understanding of the kinds of data required for self-appraisal.

16. Demonstrates understanding and use of resources to maximize self-potential.

17. Reveals an understanding of the inter-relatedness of occupations (e.g., job family concept).

18. Views occupation as a major determinant of life style (e.g., occupation as a way of life).

IMPORTANT KNOWLEDGES AND UNDERSTANDINGS FOR A
SUCCESSFUL CAREER EDUCATION PROGRAM

1. Recognizes that understanding and acceptance of self is important throughout life.
2. Accepts the principle that persons need to be recognized as having dignity and worth.
3. Knows that occupations exist for a purpose and that there is a wide variety of occupations which may be classified in several ways.
4. Realizes that work means different things to different people.
5. Accepts the principle that education and work are inter-related.
6. Believes that individuals differ in their interest, abilities, attitudes and values.
7. Understands that occupational supply and demand have an impact on career planning.
8. Recognizes the fact that job specialization creates dependency.
9. Understands the ways in which environment and individual potential interact to influence career development.
10. Knows that occupations and life styles are interrelated.
11. Believes that individuals can learn to perform adequately in a variety of occupations.

12. Understands that career development requires a continuous and sequential series of choices.

13. Recognizes that various groups and institutions influence the nature and structure of work.

14. Accepts the fact that although individuals are ultimately responsible for their career planning, teachers have a prime responsibility for providing assistance.

15. Recognizes that job characteristics and individuals must be flexible in a changing world.

16. Realizes that the teacher is a model of a person at work who has made a career choice.

17. Believes that instruction in the decision making process enables students to expand their thinking of the options available.

18. Knows that hobbies and leisure time activities may lead to occupational opportunities if given the appropriate exposure and the individual is able to develop ability and/or skills in these activities.

19. Knows that in one way or another, all work relate, in varying degrees, to working with data, people and things.

20. Recognizes that people derive a variety of satisfactions from their work (i.e., money, personal relationships, prestige, challenge, competencies, service to others, control over others, responsibility, dependence, and an outlet for physical, mental and emotional energy).

INSTRUCTIONAL SKILL CATEGORIES*

Instructional Blending Skills

1. Promote student's acceptance of responsibility.
2. Provide student awareness experiences.
3. Promote student creativity.
4. Utilize career oriented simulation techniques.
5. Illustrate academic and vocational skill relationships.
6. Utilize individualized motivational systems.
7. Utilize career oriented materials.
8. Utilize career oriented teaching methods.
9. Design optimum career learning environments.
10. Utilize decision making components.
11. Design life oriented programs.
12. Utilize career oriented library resources.
13. Design world of work learning activities.
14. Implement self learning centers.

Teaming Skills

1. Teachers participate with other school and community personnel in revising instructional programs.
2. Provide active career education leadership

*The competencies listed under the author's categories were drawn from materials developed and validated by the School of Education, University of Michigan. These competencies and accompanying descriptions are listed in Appendix A.

Utilizing Community Resources

1. Use community people as career education resource personnel.
2. Conduct career oriented field trips.
3. Identify community career oriented resource personnel.
4. Identify employment procedures.
5. Identify employment opportunities.

Professional Development Skills

1. Develop interpersonal skills.
2. Utilize problem solving skills.
3. Utilize career education in-service training.
4. Identify occupational requirements.
5. Expand world of work experience.
6. Define career education concept.
7. Practice a career education philosophy.

Action Research and Evaluation Skills

1. Promote student self evaluation.
2. Establish student feedback systems.
3. Evaluate career oriented curriculum.
4. Assess student's performance strengths.
5. Utilize instructional feedback information
6. Assess student performance handicaps.
7. Use pre- and post-assessment techniques.

The lists of attitudes, knowledge and understandings, and skills presented here are suggestive. They are by no means to be considered totally inclusive or mutually exclusive. Their purpose is to present substance drawn from conceptualized career education practitioners' professional needs. Therefore, it is expected that individual teachers, schools and school systems should want to develop their own list. These lists should be based on the results of data generated from needs assessments (student and teacher) and goals established by local school systems and the state department of education.

It is important that recognition be directed toward the values of prescribed competencies for teacher development and associated student development criteria. The logic underlying this statement stems from the outcome desired in terms of student development and can be presented under the rubric: What Career Education In-Service Programs Will Accomplish*.

The goals sought for students through the career education competency attainments of teachers may be expressed in terms of opportunities to:

1. Acquire knowledge of their values, interests and aptitudes, and relate these to the career-decision process; and to have a variety of school generated experiences leading to the uncovering, expanding or development of additional aptitudes and interests.

*Goals adapted from working draft of competencies developed by CAPS Department, University of Maryland, College Park, Maryland, December, 1973.

2. Apply knowledge and skills which result in each making an appropriate educational and career decision and have knowledge of own characteristics relative to such decisions.

3. Seek out information which relates their personal values, interests, aptitudes and other characteristics to appropriate careers.

4. Seek out information about occupational training and continuing education options within and external to the school instructional programs, as related to their personal values, interests, aptitudes and other characteristics.

5. Develop, possess and apply skills and understandings sufficient to create and implement a personal career development plan.

6. Demonstrate useful employment-seeking skills, as well as skills related to employment success.

Figure 7 illustrates the thrust of these objectives and the avenues by which teachers may provide students opportunity to achieve these objectives.

Career Education Practitioners'

MISSION:

TO FACILITATE HUMAN DEVELOPMENT, EDUCATION PERSONNEL WILL SHOW THE BLENDING OF CERTAIN CHARACTERISTICS IN THEIR BEHAVIOR AND SPECIFIC PROFESSIONAL ATTITUDES, KNOWLEDGE AND SKILLS IN THE PRACTICE OF THEIR RESPECTIVE PROFESSIONAL ARTS.

DESIRED

PROFESSIONAL COMPETENCIES
TO PROVIDE INSTRUCTION IN
THE FOLLOWING AREAS:

- ATTITUDES
- SKILLS
- KNOWLEDGE



IN - SERVICE
CAREER
EDUCATION

- INSTRUCTIONAL
BLENDING SKILLS
- TEAMING
SKILLS
- COMMUNITY
UTILIZATION SKILLS
- PROFESSIONAL
DEVELOPMENT SKILLS
- ACTION - RESEARCH
EVALUATION SKILLS

Figure 7

Avenues by Which Teachers May Enhance Their
Career Education Competencies

TEACHER DEVELOPED CAREER EDUCATION
IN-SERVICE CURRICULUM

If career education is to become established successfully in America's schools, the impetus will of necessity have to come from classroom teachers. The greatest test of strength of the career education concept may lie in the success of the in-service curriculum. These are four reasons for this:

1. Teachers have more hourly contact with students than any other school personnel; they are more likely to effect career development.

2. The success teachers have in adapting career education in-service experiences to teacher-created-career development teaching/learning strategies are more believable than successes produced by experimenters in laboratory settings.

3. The successes, hopefully, will result in teachers transforming school work into displays of potency rather than single exercises in competency development.

4. The development of educational change policies through administrative, legislative and higher education leadership.

The development, conduction, management and evaluation of in-service programs for self and peer development is each teacher's challenge.

PLANNING THE IN-SERVICE PROGRAM

PLANNING AND IMPLEMENTING THE
IN-SERVICE PROGRAM

The adoption of a career education in-service program by an individual teacher, a school or school system demands that involved persons accept and play a facilitating role. The goals of the in-service program becomes the career development goals identified as critical to student development. Therefore, each professional member of the staff must attend and respond to roles and responsibilities which are essential and closely articulated with trajectory paths along which students are programmed to move. They must allot time, energy, interest and skills to the development of instructional materials, methodology and resources to achieve student-centered developmental goals. In turn, they expand their abilities to make changes in the educational processes. The impact of these activities exert a strong focus on the inherent opportunities for professional development via "learning by doing." In addition, it requires commitment to the career education philosophy and involvement with many activities including the following: (1) planning, (2) instructing, (3) developing, (4) installing, (5) managing, (6) evaluating; and (7) implementing. The elements enhanced by each of these components are illustrated in Figure 8.

THE CONTEXT OF:

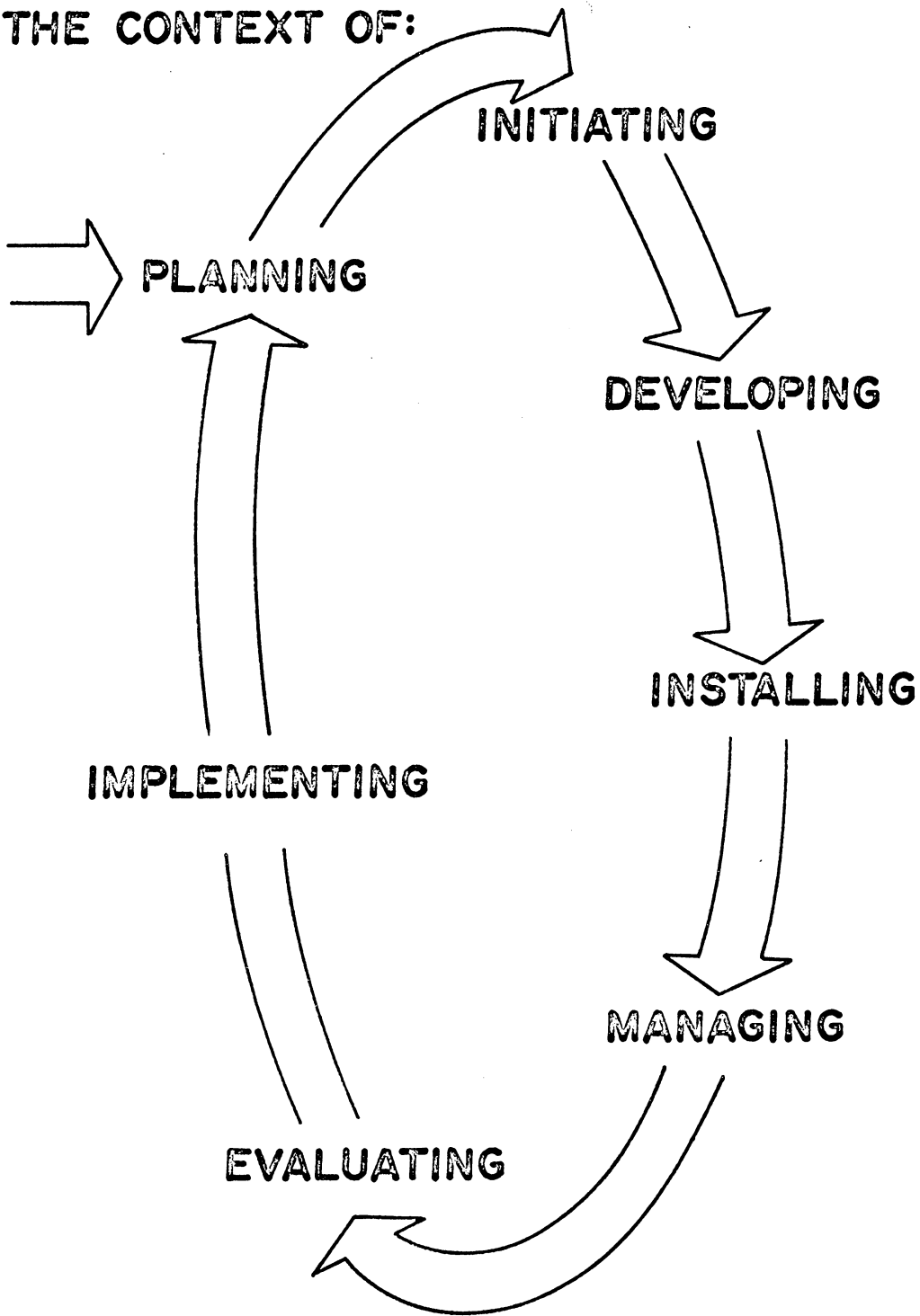


Figure 8

A Career Conscious In-Service Curriculum

THE PLANNING ELEMENT

The basic design of this framework encourages: (1) independent planning by practitioners at each level; (2) the development of comprehensive plans; (3) the establishment, in the initial planning stages, of criteria by which comprehensive plans can be evolved; and (4) commitment to terminal outcomes by which the comprehensiveness of the program can be validated.

A number of career education authorities have identified elements by which appropriate focus for developing a comprehensive career education program can be achieved. Points provided by Helling and Ruff (1973) are offered to: (1) clarify the role of career education in schools and (2) establish some parameters for program planners.

Once appropriate intent statements, conceptual tools and vehicles for planning have been established, planners will need to decide on specific criteria for determining: (1) the comprehensiveness of the functioning components of the program; (2) how existing activities fit into the total schema; and (3) what improvement, modification, creation, or elimination of elements and activities should be made in relationship to the total program.

THE CONTEXT OF A CAREER CONSCIOUS IN-SERVICE
CURRICULUM: DESCRIPTION OF ELEMENTS

Initiating

- Determining administrative support
- Adopting a career education philosophy
- Assessing needs
 - analyze situational constraints
 - analyze personal competencies
 - list current activities
- Defining objectives
 - overall program
 - list activities
 - motivational
 - instructional
 - convert activities to outcome statements
- Defining responsibilities and roles
- Committing time, energy, interests and talents to implementation of the philosophy adopted

Developing

- Determining curricular approaches
- Assembling and developing teaching materials
- Creating and adopting materials to illustrate elements of career education concepts
- Check against outcome statement
 - population
 - students
 - teachers
 - actions to be employed
 - changes desired
- Set priorities
 - school system
 - individual school
 - individual teacher
- Establish alternative solutions
- Design assessment instrument
- Establish assessment procedures
- Determine initiation, instrumentation and orientation processes

Installing

- Implementing plans
- Employing orientation and instrumentation processes
- Implementing or scheduling student activities
- Monitoring program
- Producing progress reports
- Providing for consultation
- Providing for corporate participation and evaluation
- Providing opportunity for teaming
- Providing opportunity for sharing
 successes
 concerns
 validated evidence

Managing

- Implementing operational decisions made during planning phase
- Developing and maintaining support for program leadership
- Maintaining established priorities and target dates for implementation of adopted program elements
- Translating career education goals into instructional practices
- Developing and maintaining authentic communication practices
- Promoting sharing of self evaluation by staff and individual teachers
- Categorizing, evaluating and modifying curriculum strategies utilized
- Preparing visuals to capture and preserve extremely useful in-service practices (video taping of conferences, seminars, role-playing and demonstrations)
- Carrying the program forward: sharing responsibilities in terms of time, expenses, skills, work load, etc.
- Creating and maintaining a facilitating teaching/learning environment

Evaluating

- Providing forms for
 - assessment of process
 - review of products
 - consideration of alternatives
 - consideration of effects of program on students
 - teacher's performance
 - assessment of involvement of teachers

- Determining results
 - forums on accountability
 - illuminates new possibilities
 - highlights program values and accomplishments

- Designing data collection instruments
 - questionnaires
 - self inventories
 - check list
 - pre- and post-measures
 - professional observation and judgment
 - interview schedules
 - skill-application test

- Determining adequacy of
 - goals
 - materials
 - strategies
 - resources
 - teaching style
 - administrative style
 - parental and community participation and cooperation

EVALUATION OF TOTAL PROGRAM

The collection and analysis of evaluation data should lend, in most instances, to changes in career education programs for students and corresponding teachers in in-service programs. For instance, these data show that students are not attaining the prescribed objective may result in a need to review competency information which, in turn, may lead to revision in student performance goals, in-service strategies and instructional methodology.

In view of the fact that almost infinite possibilities exist for utilization of evaluation data results, the activities listed in this component of the model are suggestive guidelines for designing courses of action and instruments related to the ascertainment and evaluation of feedback information.

Procedures and Activity Suggestions*

1. Develop a plan for program evaluation in terms of:
 - a. Skills developed
 - b. Achievement in terms of performance outcomes
 - c. Attitudes
2. Review the respective programs or program components in terms of:
 - a. Evaluation activities appropriate for classroom programs
 1. Teachers
 2. Advisory committee
 3. In-service program (instructors, workshops, etc.)

*Adapted from Planning, Implementing and Evaluating Career Preparation Programs (Davis and Borgen, 1974).

- b. Data gathered
 - c. Recommended time cycle
 - d. Useful or essential for
 1. Instructional program planning
 2. In-service program planning
 - e. Staff development assignments
 - f. Instruction - direction for implementing and completing
 - g. administrative roles
3. Specify evaluation activities to be utilized
 - a. Objectives
 - b. Target group
 - c. Activity
 - d. Time frame
 4. Select evaluation activities to be accomplished
 5. Execute the evaluation activities and plan developed in Step 4
 6. Gather, analyze, summarize and prepare report of results of evaluative activities completed
 7. Make a comparison between established objectives and feedback that has been gathered, analyzed and summarized
 8. Use this data to demonstrate achievement of in-service goals
 9. Generate ideas as to how data can be used for making program changes
 10. Identify and develop procedures whereby evaluation data can be used to provide implications for
 - a. Staff
 - b. Facilities
 - c. Materials
 - d. Equipment
 - e. New programs
 - f. Budgetary considerations
 - g. Administrative support

A DEFINITION OF IN-SERVICE EDUCATION

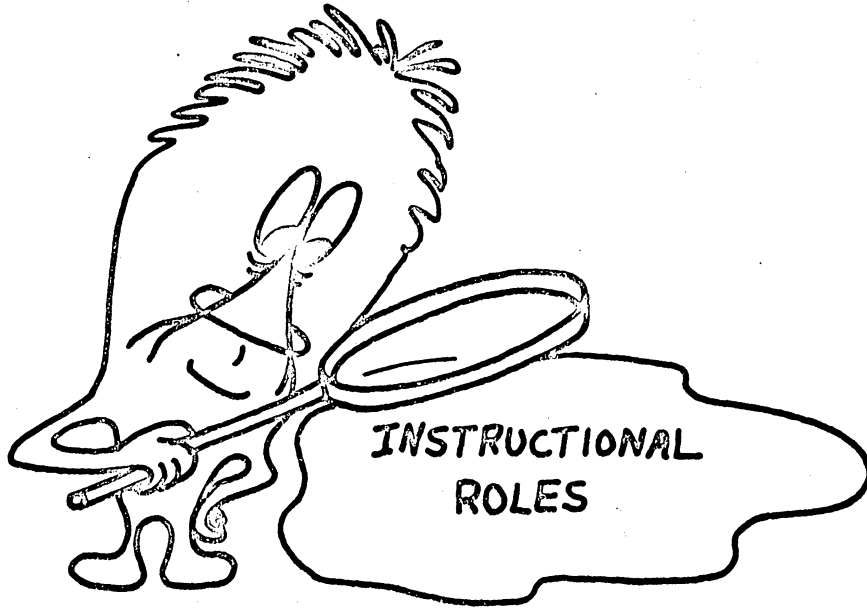
"In-service education is that portion of professional development that should be publicly supported and includes a program of systematically designed activities planned to increase the competencies--knowledge, skills, attitudes--needed by school personnel in the performance of their assigned responsibilities."

Wendell C. Allen
Rethinking In-Service Education
NEA, 1975

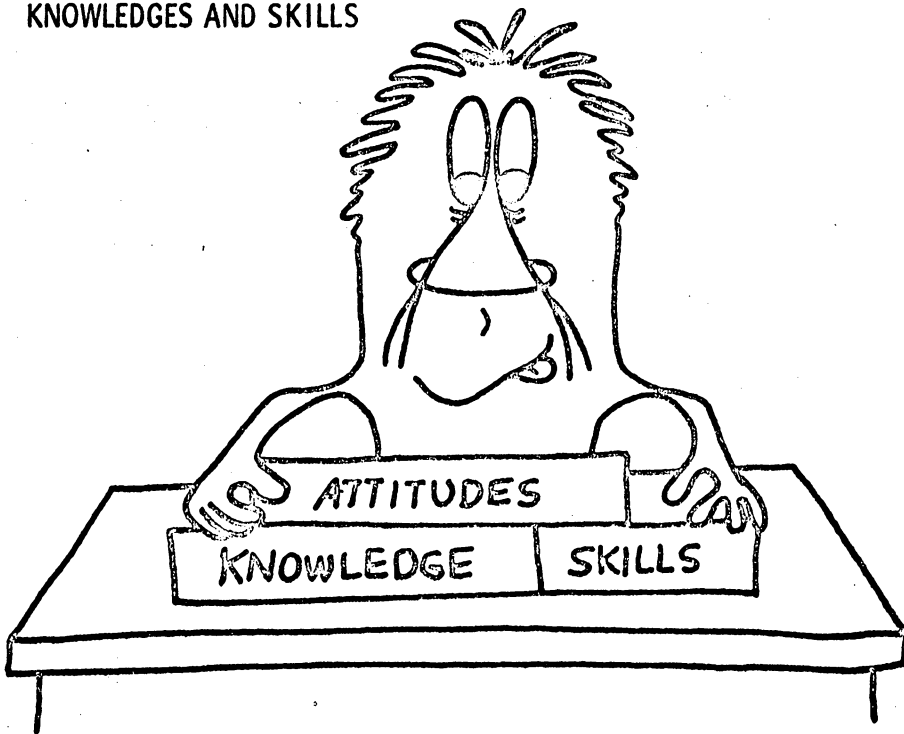
IN-SERVICE CAREER EDUCATION DEFINED: A SUMMARY

In-service career education is.

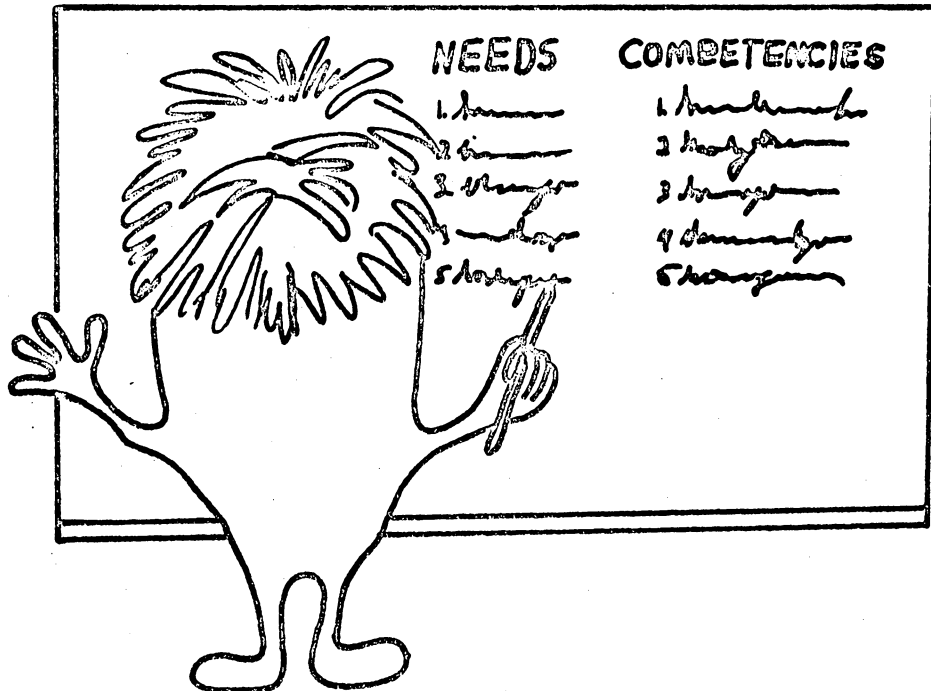
IDENTIFYING TEACHER'S CAREER EDUCATION INSTRUCTIONAL ROLES



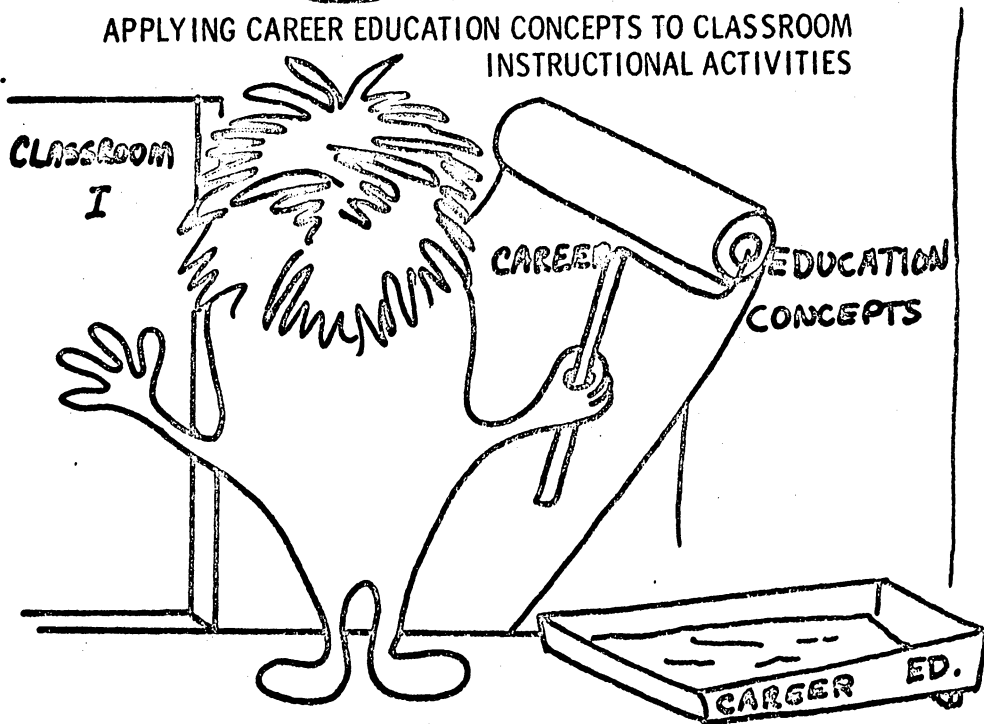
DEVELOPING COMPETENCIES INVOLVING A COMBINATION OF ATTITUDES, KNOWLEDGES AND SKILLS



ASSESSING TEACHER'S CAREER EDUCATION NEEDS AND COMPETENCIES

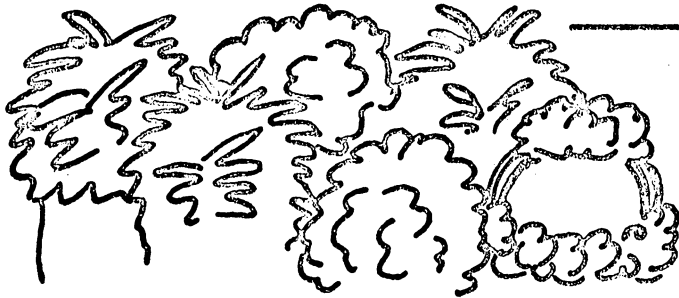
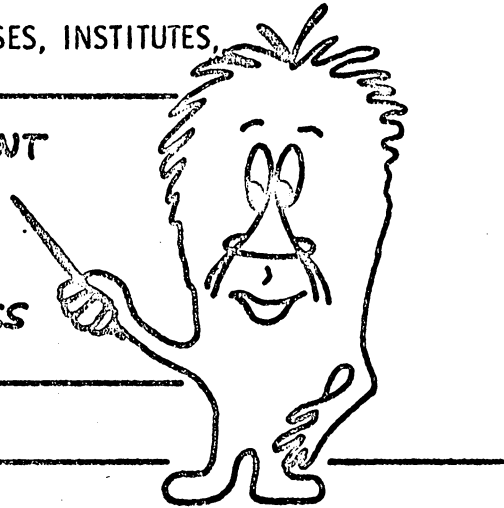


APPLYING CAREER EDUCATION CONCEPTS TO CLASSROOM INSTRUCTIONAL ACTIVITIES

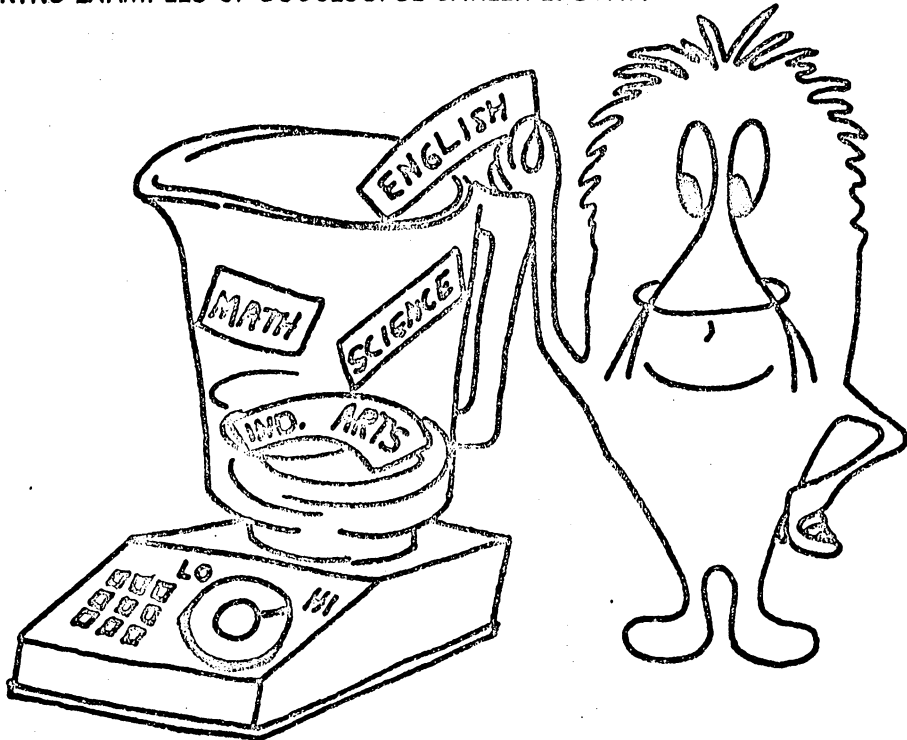


ATTENDING CAREER EDUCATION CLASSES, INSTITUTES,
WORKSHOPS AND CONFERENCES

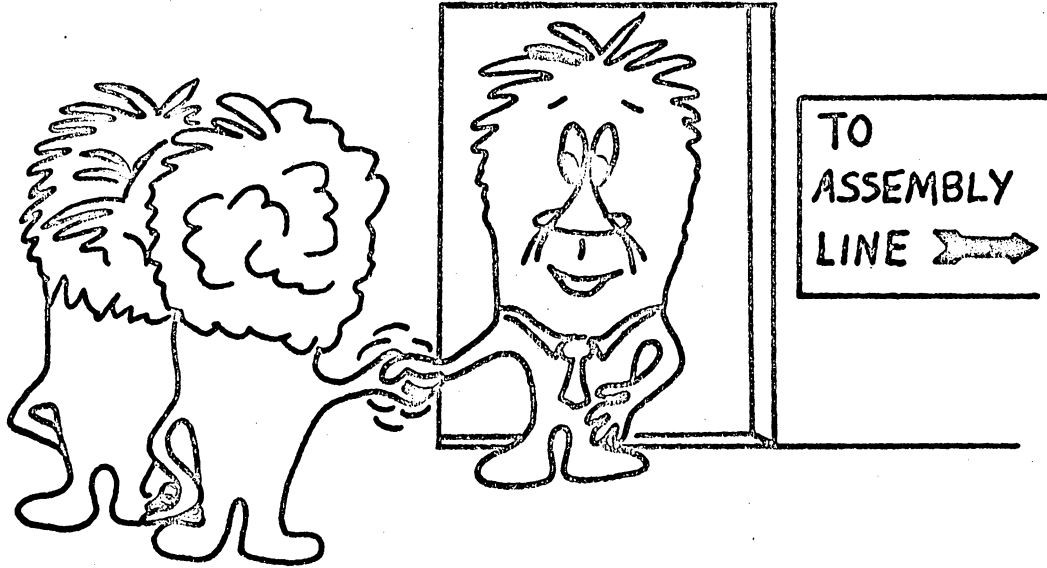
CAREER DEVELOPMENT
AWARENESS:
SELF
WORK
EDUCATIONAL PROCESS



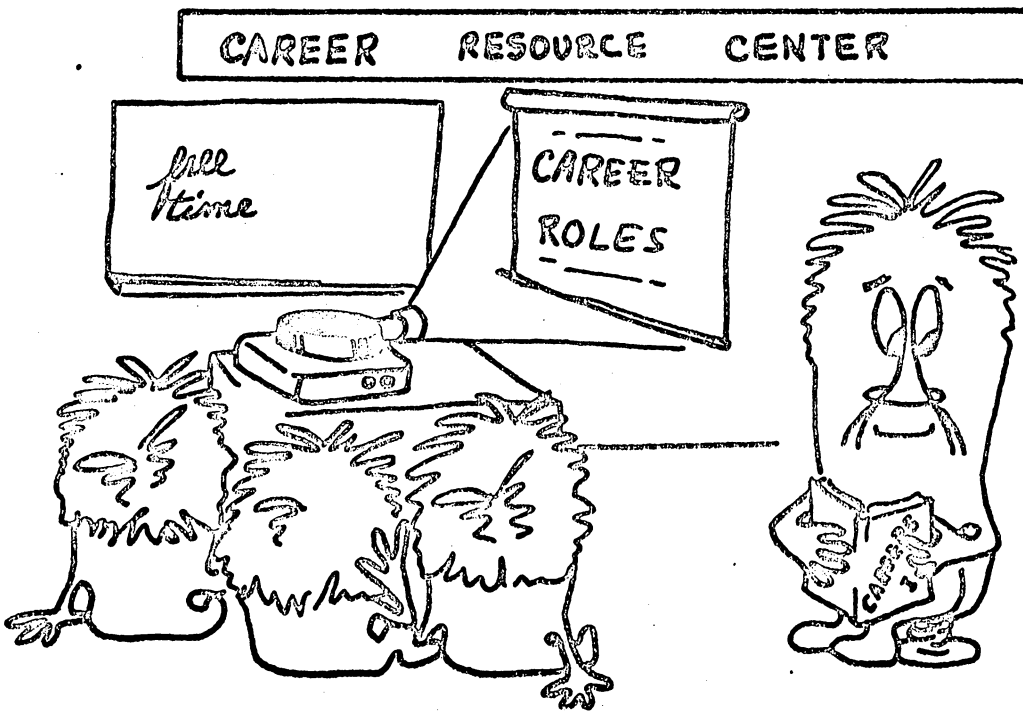
SHARING EXAMPLES OF SUCCESSFUL CAREER EDUCATION BLENDING ACTIVITIES



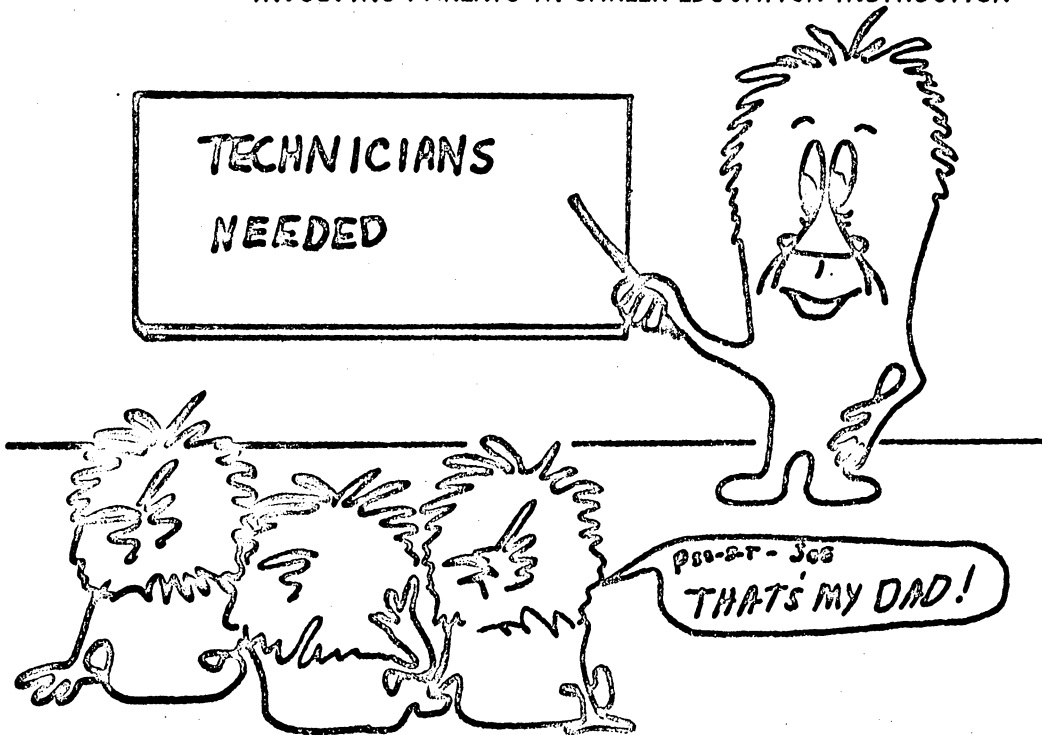
BECOMING FAMILIAR WITH CAREER RELATED COMMUNITY RESOURCES



CONDUCTING ACTION RESEARCH IN THE CLASSROOM



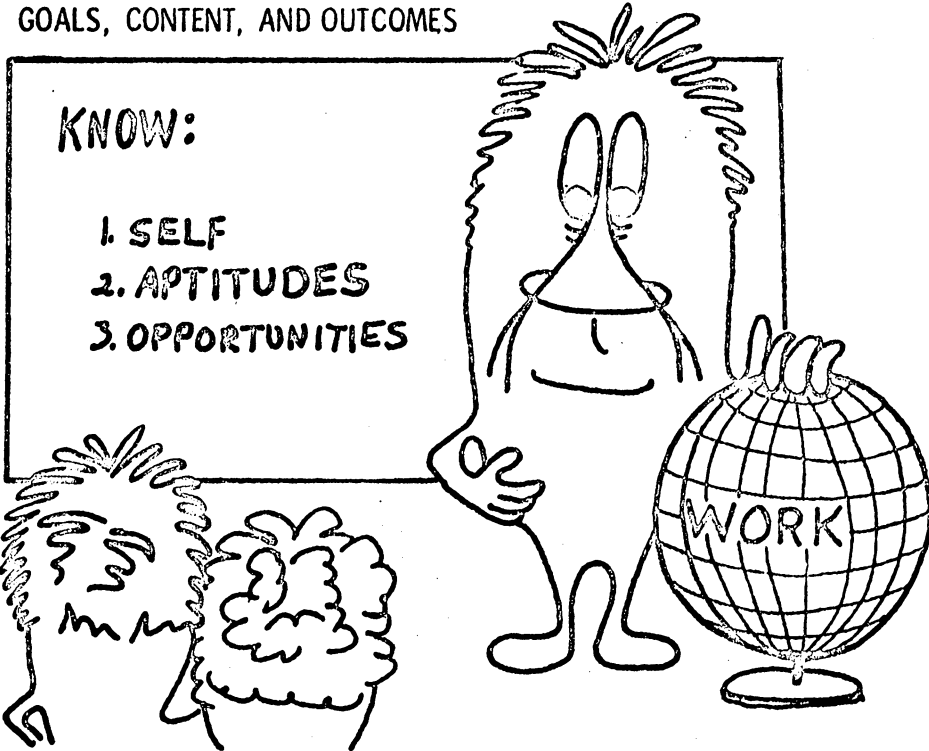
INVOLVING PARENTS IN CAREER EDUCATION INSTRUCTION



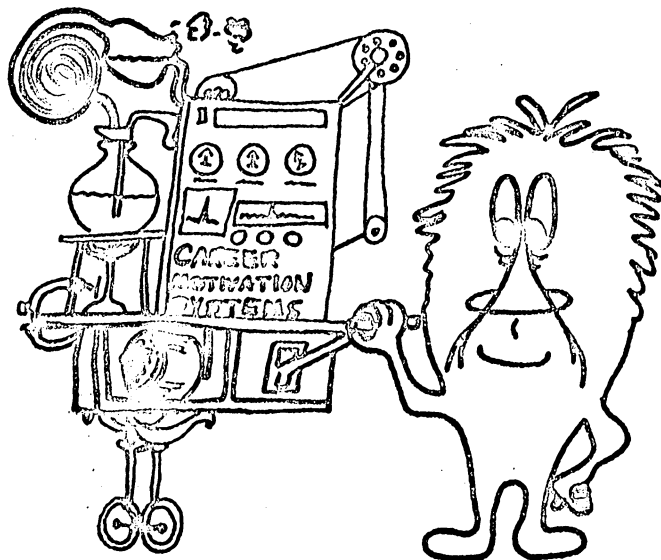
IDENTIFYING OCCUPATIONAL REQUIREMENTS



RELATING KNOWLEDGE OF SELF AND THE WORLD OF WORK TO CURRICULAR GOALS, CONTENT, AND OUTCOMES



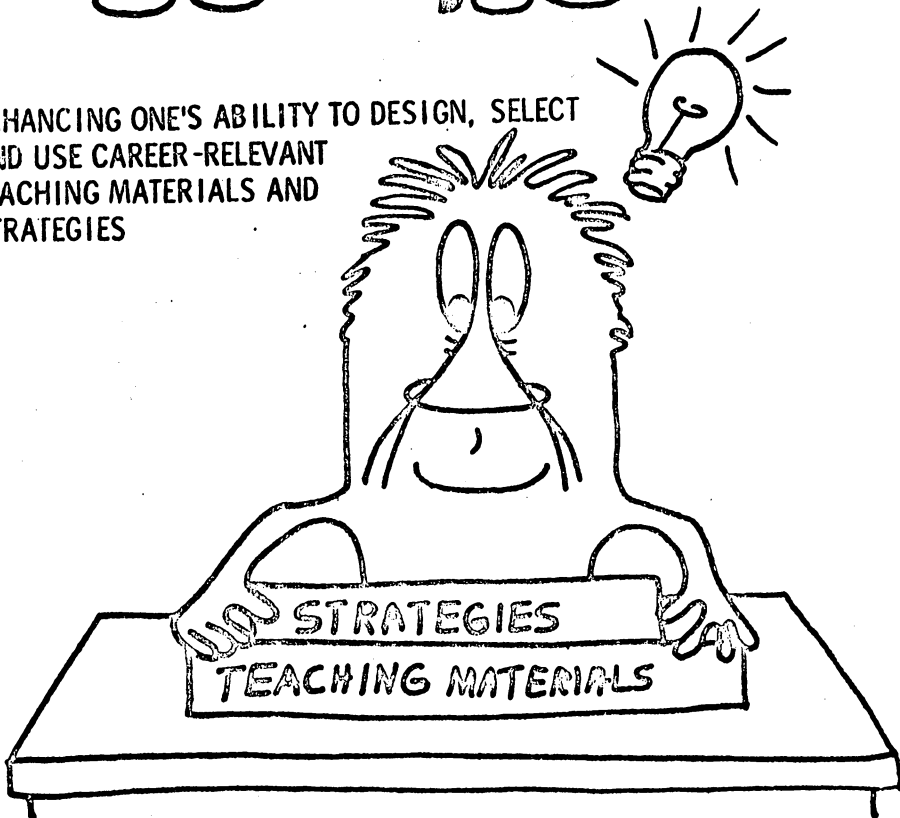
UTILIZING INDIVIDUALIZED CAREER-MOTIVATION SYSTEMS

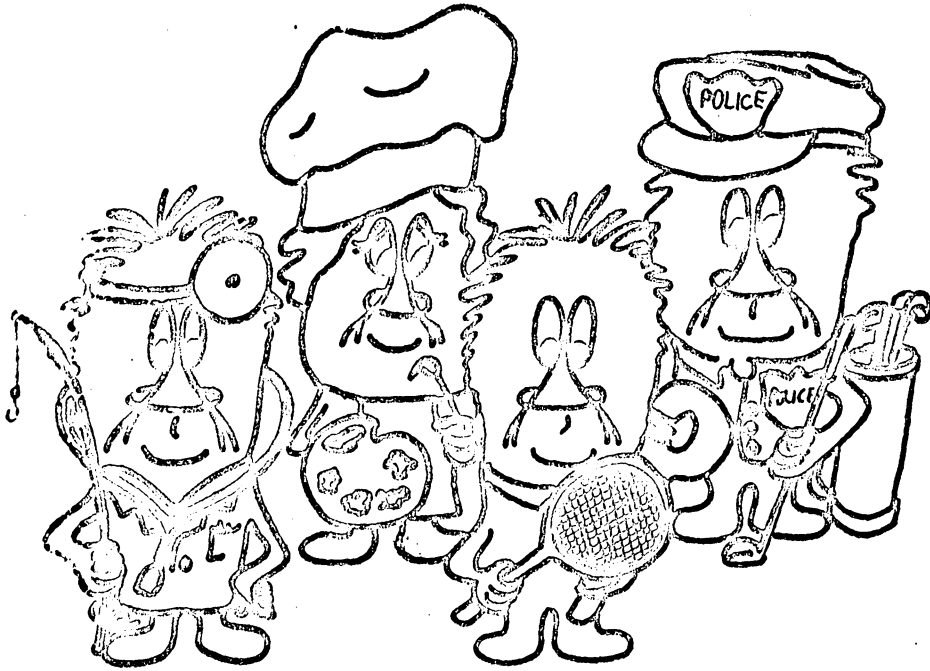


PROVIDING MODELS OF A VARIETY OF SUCCESSFUL WORKERS

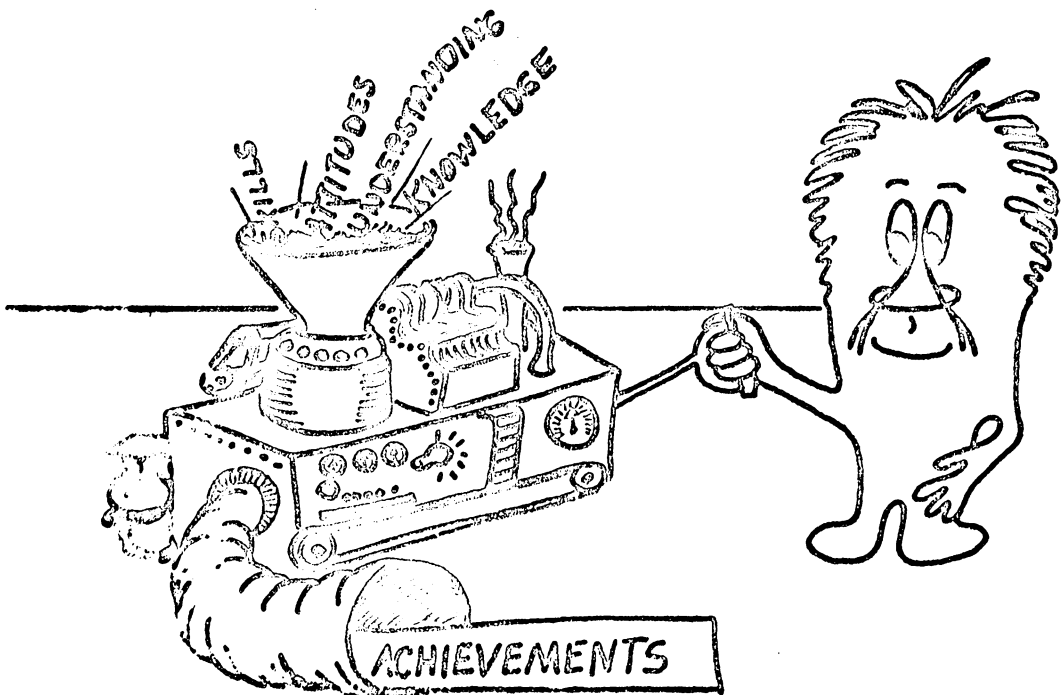


ENHANCING ONE'S ABILITY TO DESIGN, SELECT
AND USE CAREER-RELEVANT
TEACHING MATERIALS AND
STRATEGIES

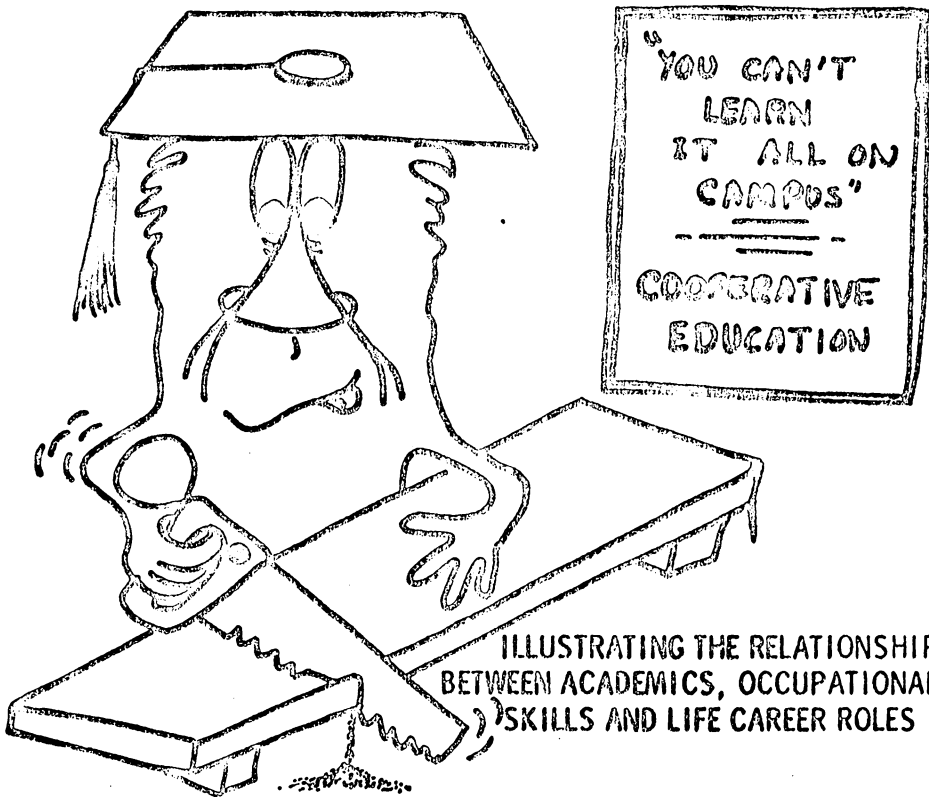




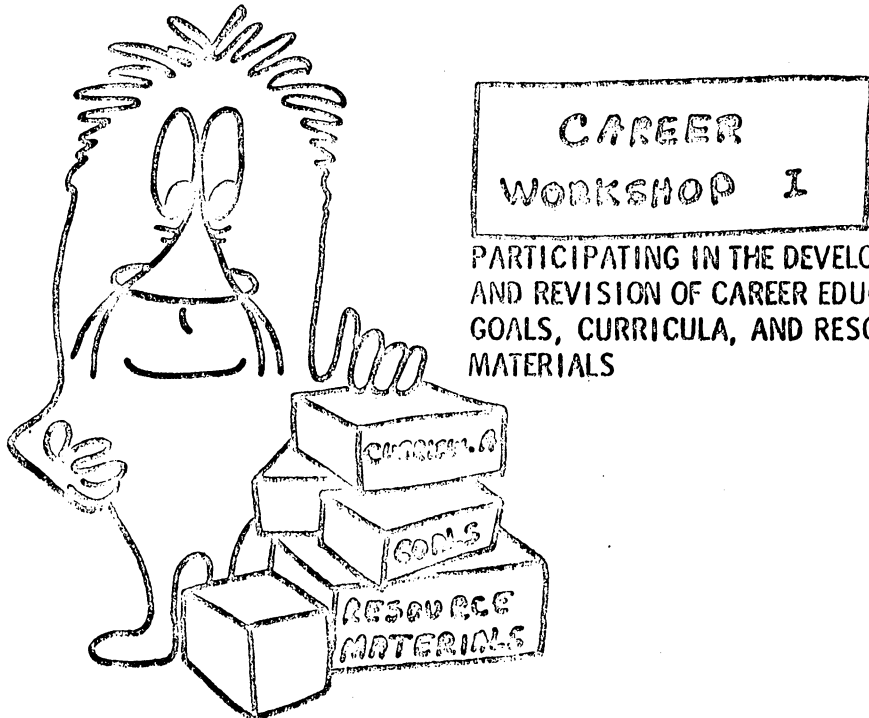
UTILIZING CAREER MODELS TO SHOW LEISURE RELATIONSHIP



CREATING NEW MEANS OF EVALUATING LEARNING OUTCOMES



ILLUSTRATING THE RELATIONSHIP BETWEEN ACADEMICS, OCCUPATIONAL SKILLS AND LIFE CAREER ROLES



PARTICIPATING IN THE DEVELOPMENT AND REVISION OF CAREER EDUCATION GOALS, CURRICULA, AND RESOURCE MATERIALS



GIVING AND RECEIVING KNOWLEDGE IN A CORPORATE PROFESSIONAL SETTING



TEAMING WITH OTHERS TO PROVIDE LEARNERS MEANINGFUL AND STIMULATING CAREER DEVELOPMENT EXPERIENCES

THE MODEL FORMAT

The in-service career education model illustrates the areas where teacher involvement is necessary to the implementation of career education and professional development. Emphasis is placed on maximizing this involvement. The model appears as Figure 9 and is followed by a description of each of its components.

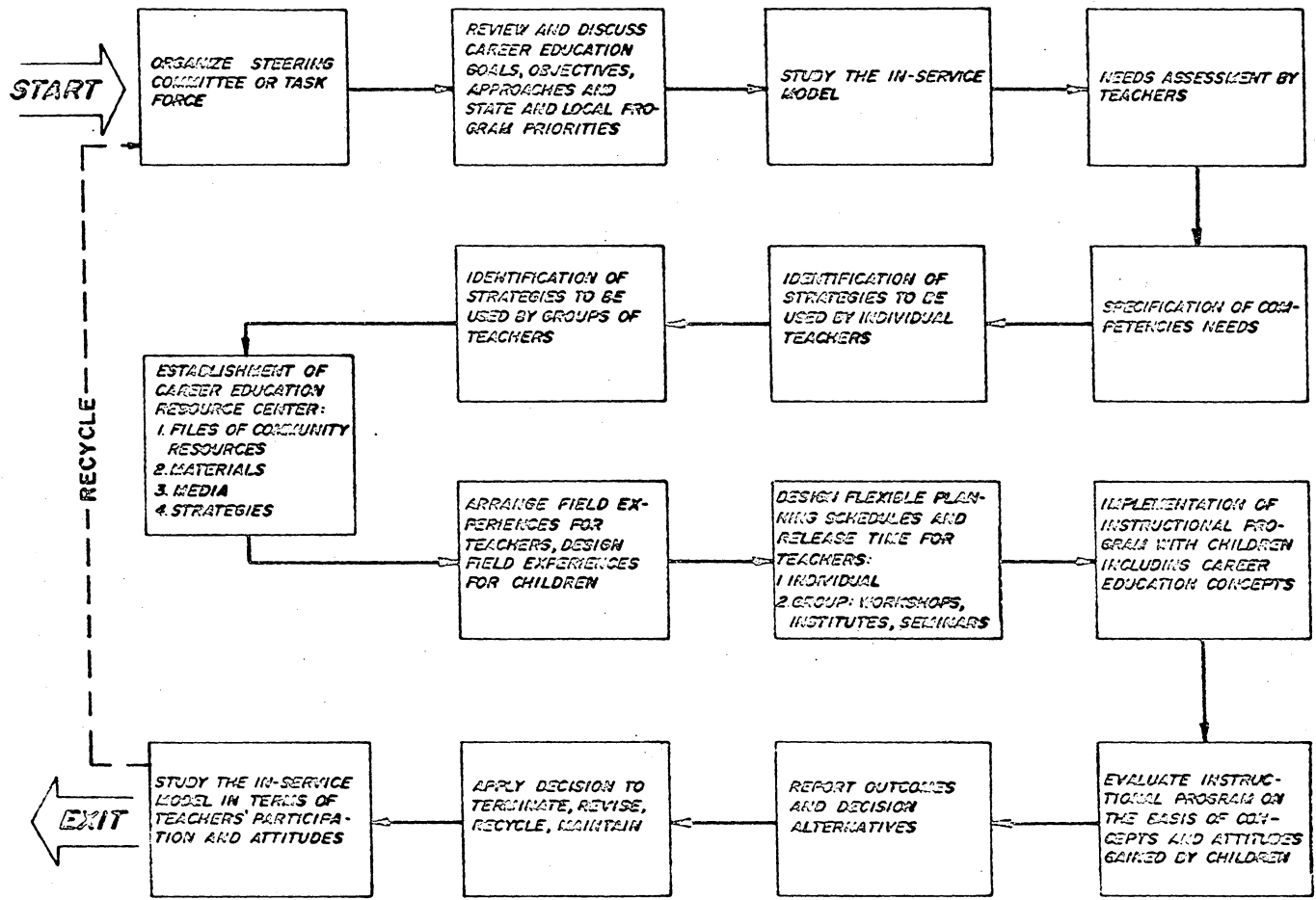


Figure 9

In-Service Career Education Model

MODEL COMPONENTS EXPLANATIONS

1. Study the In-Service Model

Develop an understanding of the approach, its rationale, assumptions, advantages, disadvantages, skills and resources to be employed in its implementation.

2. Organize Steering and Advisory Committees

Form program advisory and planning teams to ensure a career development program that is sensitive to the needs of a total school community. Key individuals--school administrators, guidance and curriculum personnel, as well as students, parents, teachers and community persons--should be involved in program planning at the outset.

3. Review and Discuss Career Development Theory

Development of a comprehensive program and a consistent philosophy and assumptions requires the examination of leading theories of career development (four are suggested, others may be added) and an analysis of one's program and thinking in light of these.

4. Study the Model

Review the model components beginning with the first one, assess accomplishments, decide whether to advance or repeat previous steps.

5. Needs Assessments

(1) Utilize a systematic data gathering process to determine the activities desired for students and teachers from the career education program and corresponding in-service activities.

(2) Assess current status of career education program for students, teachers, felt in-service needs and current resources.

(3) Define and summarize needs, identified resource allocations and pragmatic goals and evaluation criteria and provisions for the career education program.

6. Specification of Competencies

Define and specify behaviors or skills teachers and students are expected to better perform if a goal has been achieved-- a practical set of goals to be addressed through the in-service career education curriculum.

7. Identification of Strategies (Individual)

Move from statement of desired goals and competencies to consideration of means for best reaching these student development goals and teacher competency by defining tasks to be achieved by individual teachers and dates for accomplishment.

8. Identification of Strategies (Group)

Formulate plans of action which define all the things which must be done to ensure that the program is helping teachers to improve attitudes, understandings, knowledge and skills.

9. Establish Career Education Resources

Explore and establish ways to enable staff members to develop their talents and to assist other staff members to make viable contributions to peer and student development.

10. Arrange Field Experiences

Employ field experiences (external to school) through first hand study of work in local business, industrial, governmental and labor establishments--should be scheduled on release time basis, vacation periods, after-school hours and on weekends.

11. Design Flexible Planning Schedule

For improvement of staff competency, release time for planning, developing materials, participating in in-services, conducting student activities within and external to the school is essential, and should be built into the overall school schedule and procedural policies.

12. Implement Instructional Program with Students

Try out activities with students. Monitor feedback mechanism as the program is implemented, conducted and managed to detect and predict problems and to help to make on-going decisions to allow the program to operate as effective as possible.

13. Evaluate In-Service Programs

Communicate feedback data on program implementation, management and assessment; use these results to tailor in-service activities to implied and identified student and teacher needs. Communicate decisions made, data needed activities for design and trajectory and dates for accomplishment.

14. Report Outcomes and Decision Alternatives

Communicate evaluation results, using evaluation results through the use of systematic feedback gathering devices and procedures. Specify the characteristics of the target group, changes, resource needs, recommendations and implications and appropriate responding activities.

15. Apply Decision Alternatives

Examine resources, recommendations, implications and recommended responding activities, experiences and judgements accordingly.

16. Study In-Service Model

Study in-service model in conjunction with data collected pertaining to the impact of program on student and teacher development. Make decisions to maintain and recycle, modify and recycle or terminate specific components and/or program activities.

APPLICATIONS OF THE MODEL:
FOUR EXAMPLES

The models presented in this section feature the major program components suggested by the theories, concepts, rationales, and philosophical foundations reviewed in the preceding sections of this framework.

MODEL FOR BLENDING CAREER EDUCATION INTO
THE MIDDLE SCHOOL CURRICULUM

The model for blending career education into the middle school curriculum presents an action oriented concept. It conveys the idea of teaming to ensure the proper blending of all curriculum elements in defining, selecting and implementing activities to ensure the career development of "all students" and the corresponding professional development of "all staff members"--teachers, librarians, counselors and administrators, thus, providing for the strengthening and coordinating of the internal roles and selectivity of outside resources in the establishment, maintenance and improvement of career development program activities.

This model appears as Figure 10 on the following page.

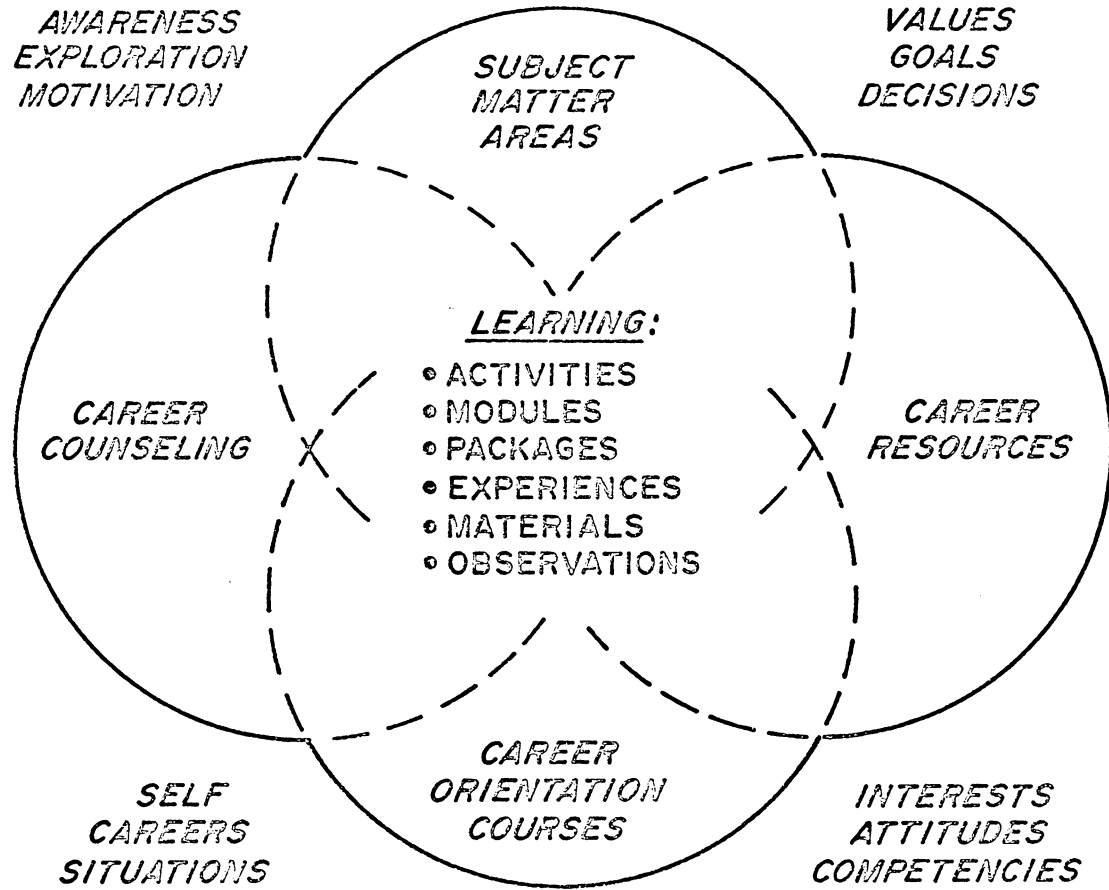


Figure 10

Model for Blending Career Education Into
The Middle School Curriculum

THE CAREER EDUCATION TRIADS: A TAXONOMY
FOR CAREER DEVELOPMENT*

The career education triads model attempts to establish and clearly define the concept of blending career education into the on-going middle school curriculum. It illustrates the relationship of good professional development activities to conceptualize career development elements and instructional blends, thus providing a map whereby teachers can recognize the destination desired for an in-service teaching model. In turn, teachers whose goals are to create instructional models, career resource centers, learning packages, discussion units, social-drama and/or other teaching/learning strategies have at hand clear-cut goals, impetus for attaining the goals and avenues for monitoring and assessing responding behavior.

Figure 11 portrays this model and is followed with a listing of career developmental tasks for students at each level. The listing of the career developmental tasks for the various levels illustrates the continuity of each task and highlights the importance of the concepts for school-based career education programs.

*Adapted from Williamson's theoretical perspectives for human development, 1965.

The Career Education Triads:

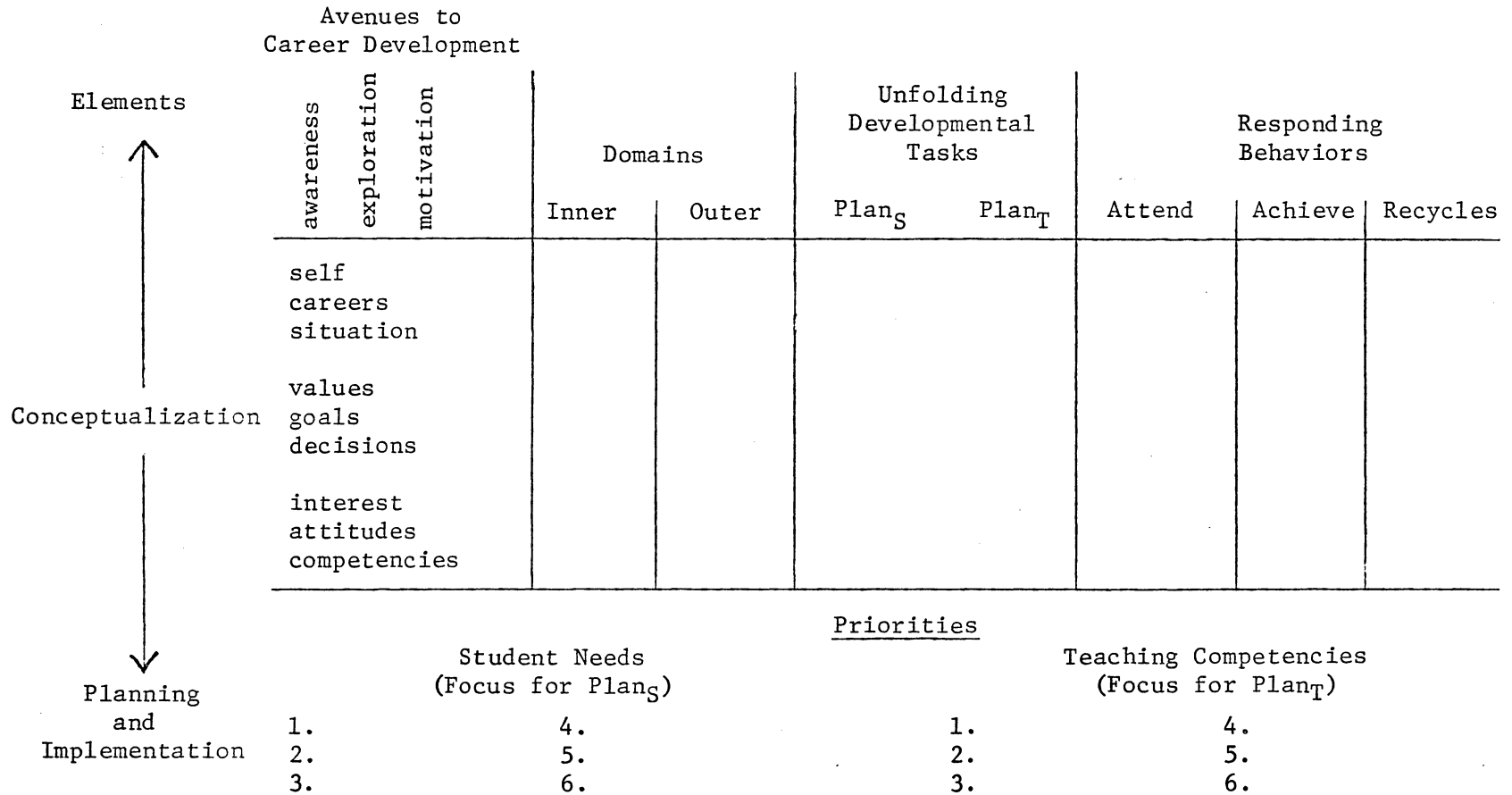


Figure 11
A Taxonomy For Career Development

Tasks For Career Development*

PRIMARY YEARS

1. Awareness of self
2. Acquiring a sense of control over one's life
3. Identification with workers
4. Acquiring knowledge about workers
5. Acquiring interpersonal skills
6. Ability to present oneself objectively
7. Acquiring respect for other people and the work they do

INTERMEDIATE YEARS

1. Developing a positive self concept
2. Acquiring the discipline of work
3. Identification with the concept of work as a valued institution
4. Increasing knowledge about workers
5. Increasing interpersonal skills
6. Increasing ability to present oneself objectively
7. Valuing human dignity

JUNIOR HIGH YEARS

1. Clarification of a self concept
2. Assumption of responsibility for vocational planning
3. Formulation of tentative career goals
4. Acquiring knowledge of occupations and work settings
5. Acquiring knowledge of educational and vocational resources
6. Awareness of the decision-making process
7. Acquiring a sense of independence

HIGH SCHOOL YEARS

1. Reality testing of a self concept
2. Awareness of preferred life style
3. Reformulation of tentative career goals
4. Increasing knowledge of and experience in work settings and occupations
5. Acquiring knowledge of educational and vocational paths
6. Clarification of decision making processes as relating to self
7. Commitment with tentativeness within a changing world.

*Developed by College of Education, University of Minnesota, September, 1973.

EXAMPLES OF POSSIBLE CAREER EDUCATION TOPICS, TRAINERS
AND STRATEGIES: A FORMAT FOR ORGANIZING A CAREER
EDUCATION IN-SERVICE PROGRAM

Because career education is expected to be blending into existing educational curriculum structures, it requires incorporation of career information into existing teaching objectives rather than adding on additional ones. For this reason career education has strong implications for in-service education. The initial goal of career education in-service should be the acquainting and committing of all teachers to the broad concepts of career education.

Subsequent goals of career education in-service should embrace new knowledge and expertise about the world of work, new instructional materials, released time to design and assemble appropriate materials, administrative support for classroom endeavors and time to modify the curriculum.

Figure 12 provides examples of possible career education topics, trainers and strategies, offers concrete examples of how an in-service program can be organized around a common set of topics, interim training sessions, vital information and typical as well as innovative teaching/learning strategies.

Hopefully the topics suggested will appeal to career education practitioners. However, it is more important that attention be given to generating topics for study which speak to the felt needs of classroom teachers in their respective educational settings.

Examples Of Possible Career Education Topics, Trainers and Strategies:

<u>In-Service Activities</u>	<u>Topics</u>	<u>Trainers</u>	<u>Strategies</u>
A. <u>Workshop</u>	<ul style="list-style-type: none"> -Introduction to career development concepts, theories, accommodations -Needs assessment strategies -Program implementation -Follow-up and evaluation -Organizing and orienting advising committee, parent council, task force, steering committee 	<ul style="list-style-type: none"> Classroom teacher University professor Principals Counselors Public school supervisor State Department of Education personnel 	<ul style="list-style-type: none"> Large group lecture Panel discussion Small group discussion View films Survey instruments (exam) Production of materials and instruments Provide self assessment
B. <u>Small Group Seminar</u>	<ul style="list-style-type: none"> -Intervention strategies -Career developmental tasks -Instructional program needs and competency management -Facilitating career development 	<ul style="list-style-type: none"> Teachers Team leaders Consultant University professor Counselors Principals 	<ul style="list-style-type: none"> Small group discussion on problems Brainstorming Group sharing

Figure 12

A Format For Organizing A Career Education In-Service Program

<u>In-Service Activities</u>	<u>Topics</u>	<u>Trainers</u>	<u>Strategies</u>
C. Field Study	<ul style="list-style-type: none"> -The structure of work -Local industry -Occupational groupings 	<ul style="list-style-type: none"> Representatives of: National Alliance of Businessmen Chamber of Commerce Industrial Development Commission Counselors of State Employment Commission Personnel officers Industry Labor Government 	<ul style="list-style-type: none"> Plant tours Seminars Films Large group lectures Brochures Work try-out internships
D. <u>Graduate Course</u>	<ul style="list-style-type: none"> -Principles and Practices of Career Education -Career Education in the Middle School -Career Education for Atypical Youth -Life Skills in School and Society -Occupational-Educational Development 	<ul style="list-style-type: none"> University professor Psychology teacher in local school Teaching teams Member of advisory committee Vocational and/or industrial arts teachers Work-study program coordinators Placement officers 	<ul style="list-style-type: none"> Instructional modules Large group lectures Laboratory sessions Observations Individual conferences

<u>In-Service Activities</u>	<u>Topics</u>	<u>Trainers</u>	<u>Strategies</u>
E. <u>Performance Modules</u> (schedule according to need)	<ul style="list-style-type: none"> -Understanding the structure of work -The work ethic -Sources of occupational information -Relating self, career and work 	<ul style="list-style-type: none"> Classroom teachers Member of staff development team Consultant Instructional leader Representatives of business, industry, labor, and government Counselors Work study coordinator 	<ul style="list-style-type: none"> Individual study Development of teaching/learning modules Conferences with consultants and/or fellow teachers Try-out modules with students Demonstration of mastery of performance module goals by students
F. <u>Parent Workshops</u> (or small group meetings)	<ul style="list-style-type: none"> -School, parent and community relationships -Managing library, classroom and career resources center materials and activities 	<ul style="list-style-type: none"> Community consultants Classroom teachers Librarians Counselors Parents 	<ul style="list-style-type: none"> Group discussion Role play Participation by parents in classroom activities Assistance of parents with field trips Assistance of parents in managing career resource centers.
G. <u>Observation and/or Design Days</u>	<ul style="list-style-type: none"> -Developing instructional materials, games, learning centers, study packages and prescription modules 	<ul style="list-style-type: none"> Media specialist Classroom teachers Consultants 	<ul style="list-style-type: none"> Production of materials Demonstrations

THE DEVELOPMENT OF A CAREER EDUCATION TOPIC EMPLOYING
AN OPEN-ENDED CONCEPT: AN EXAMPLE OF A TOPICAL
APPROACH FOR IN-SERVICE PLANNING

The example for developing a career education topic for in-service planning employs an open-ended concept designed to permit entry or exit wherever the teacher feels it is needed. An evaluation of knowledge and understanding acquired as well as experiences and appreciations gained can also be made at various levels.

Figure 13 is designed as an example to provide in-service teachers experiences that will enhance their world of work understandings, appreciations, knowledge and teaching skills and will, in turn, help them become more effective as career education practitioners. The various components of this example should allow for flexibility in curriculum content and schedule.

Purpose	Topic or Course Title	Curricular Aspects	Curriculum Content	Instructional Strategies	Variable Time Schedule Duration	Period	Outcome Variables	
<p>Aim:</p> <p>To provide in-service teachers experiences that will enhance their world of work understandings, knowledge and teaching skills.</p> <p>Behavioral Objective:</p> <p>After participating in the experiences of an in-service program on the structure of work in America, teachers will increase their understanding, knowledge, and teaching skills related to this topic with a range of 85-90 % mastery</p>	The Structure of Work in America	Cultural Imperatives	Traditions Values Patterns Ethics	Reading Lists Tele-Lectures	Summer Institute or Conference 3 days	June	Teacher will be able to: Provide learning experiences to facilitate students' understanding of the conditions which promote change and the importance of developing change-coping-behavior.	
				Film/Film Strips	Seminar 2 or 3 hour sessions	Sept.		
				Newsletters Profile Sheets	Workshops 2-1/2 day sessions	Sept.		
				Plant Tours Observations	6 Study Tours (Independently or Small Groups)	Sept.		
		Classification of Work DOT Scheme	Data People Things	Demonstration: "How to Use DOT"	2 3-hour sessions		Oct.	Relate instructive programs more closely to the general employment needs of the community.
					Cluster Approaches	USOE's Clusters	Activity: A Building Unit or Modular	
		Film Festival	Symposium 3 hour sessions	Nov.				
		Discussion of Occupational Clusters	Small Group sessions					
		Instructional Uses of Work World Knowledge	Examination of Resource Materials	3 3-hour sessions		In Building Work Teams 1 3-hour time period	Nov.	Requisition and/or develop appropriate career education resource materials for classroom and professional usage. Artfully put into a learning structure relevant materials extracted from massive career education information sources.

Figure 13

An Example Of A Topical Approach For In-Service Planning

Purpose	Topic or Course Title	Curricular Aspects	Curriculum Content	Instructional Strategies	Variable Time Schedule Duration	Period	Outcome Variables
		Available Resources	Curriculum Guides Books Audio Visuals Wall Charts Student Work Sheets	Demonstrations Films	Workshops 2 or 3 sessions of 2 hr. duration	Dec. ↑	Teacher will be able to: Categorize, requisition and/or develop curriculum materials.
		Evaluation of Resources	NVCA Guidelines	Resource Centers Tour or Exhibit Job Fair	Browse-in 1 week flexible time visitation 1 day a month or a quarter		Work with representatives of business, industry and government and community agencies to enhance students' world of work knowledge.
		Field Testings Total Learnings		Independent Study Groups, Critiques a. large structure b. small structure	3 weeks 3-hr. sessions 2-hr. sessions	Jan. ↓	Provide personalized professional development in-service activities.
		Evaluation Feedback	Nature of work and structure of work world Criteria: growth and understanding	Feedback Reports Participants apply in own work settings	Periodic checks to determine progress made and improvement needed	Feb. ↑	Become actively involved in continuing study to increase professional career education competencies.
			Acquisition of job skill knowledge important to career education Criteria: growth in ability to relate data to self-insight and understanding	Self check list Demonstrations, student-produced materials such as collages, posters, short stories, etc.	Open-ended periodic or end of program year.	May ↓	Demonstrate the ability to translate career education philosophy and theory into practice. Utilize information technology to bring to the learning environment pertinent career education information and articulated career development experiences.

Figure 13 (continued)

SUMMARY

Five models or graphics illustrating the relationship between content, teaching methodology, goals, objectives and domains of learning for career development have been presented.

They are entitled:

1. In-Service Career Education Model
2. Model for Blending Career Education Into The Middle School Curriculum
3. The Career Education Triads: A Taxonomy For Career Development
4. Examples Of Possible Career Education Topics, Trainers and Strategies: A Format For Organizing A Career Education In-Service Program
5. The Development Of A Career Education Topic Employing An Open-Ended Concept: An Example Of A Topical Approach For In-Service Planning

These illustrations, hopefully, provide a level of perception adequate for a valid understanding of avenues, techniques and content whereby the best career education curriculum possible can be developed for middle school teachers and youth.

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APPENDICES

APPENDIX A

SPECIAL NEEDS OF MIDDLE SCHOOL YOUTH: SPECIAL
RESPONSIBILITIES OF MIDDLE SCHOOL STAFF

Unique Problems of Middle School Youth	Responsibilities of Middle School Staff
1. Physical and Self-Concept Development	1. Physical and Self-Concept Development
Uncertainty of self and of others' views of self	Provide environment for personal security
Abundance of sheer physical energy	Understand range of normal behavior
Significant physical changes	Appreciate, enjoy, and capitalize on physical difference
Quest for awareness of self as person	Provide for freedom of expression
	Arrange for non-threatening educational environment
	Identify specific behaviorally stated objectives and supporting learning activities
Understanding the impact of situational factors on educational, occupational and self-development	Provide opportunities in the instructional program to study problems drawn from a cross section of occupations, illustrating the physical, personal, environmental, social, recreational, economic, and education factors which influence the development of the self-concept and a preferred personal life style

Adapted from: Donaly E. Overly, Jan Rye Kingshorn, and Richard L. Preston, "Rationale For the Middle School," The Middle School: Education for Youth. Worthington, Ohio: Charles A. Jones Publishing Company, 1972.

Unique Problems of Middle School
Youth

Responsibilities of Middle School
Staff

2. Determination of New Goals

Move from home or school domination to freedom from constant

Establishment of close relationships with members of the opposite sex

Attainment of knowledge of courses and skills needed for eventual placement in desired educational programs or (first) job choices

3. Need for Exploration

Desire for time to pursue own interests

Desire for indepth study

2. Determination of New Goals

Assist pupils in experiencing with certain behaviors

Assist pupils in analyzing consequences of their behavior

Arrange for trying out of new roles

Provide support for venturing out by pupils

Encourage pupils to risk new behavior

Provide group occupational guidance, occupational units in basic courses, individual counseling and career resource centers

3. Need for Exploration

Encourage pupils to ask questions

Accept pupils' ideas of topics for independent study projects

Consider pupils' suggestions and opinions with our prejudging and immediately pointing out errors

Set aside time for student selection of activities

Provide for the right to make mistakes

Unique Problems of Middle School
Youth

Responsibilities of Middle School
Staff

Desire to test out occupational interests or skill competencies

Provide exploratory use of tools and equipment required to achieve occupational competencies in areas of interest or supervised occupational experience

Use industry and business visitation to bring students face to face with real life occupational situations

4. Resolving Conflicting Values

4. Resolving Conflicting Values

Disillusionment with adult world

Providing values clarification activities

Conflicts with fellow students

Help students develop trust in their own ideas

Uncertainty regarding congruency of curriculum with the educational, occupational and social commitments and responsibilities

Aid students in the reassessment of decisions and placement and replacement in appropriate curricula, co-curricula, occupational and community based activities

APPENDIX B

INSTRUCTIONAL SKILL CATEGORIES

Instructional Blending Skills

1. Promote student's acceptance of responsibility.
 - a. Provide an open and honest atmosphere for student learning.
 - b. Treat students as responsible individuals.
 - c. Design learning activities that place students in the position to accept and carry out responsibility.
 - d. Teach problem solving and decision making skills.
 - e. Allow student to solve own problem.
 - f. Brainstorm with students concerning various career options available and allow them to select areas to explore.
 - g. Discuss with students the merit of accepting responsibility.
2. Provide student awareness experiences.
 - a. Invite parents to the classroom to explain their occupations.
 - b. Go on field trips in small interest groups.
 - c. Place students in the community for a short period of time to observe the operation of individual businesses.
 - d. Require students to interview businessmen.
3. Promote student creativity.
 - a. Provide an open and honest atmosphere for student learning.
 - b. Design learning activities which will allow students to be venturesome and open to self awareness and career exploration.
 - c. Design activities which will allow students to spend time out in the community exploring various careers.
 - d. Design open ended written assignment pertaining to self awareness and career exploration.
 - e. Use positive reinforcement techniques.
4. Utilize career oriented simulation techniques.
 - a. Encourage students to simulate the career of the real world while studying the respective careers in the classroom.
 - b. Request resource people to simulate their career in the classroom when speaking to the class or small interest groups.

5. Illustrate academic and vocational skill relationships.
 - a. Design units of instruction that require students to use both academic and vocational skills.
 - b. Request resource people to discuss the relationship between academic and vocational skills.
 - c. Utilize the team teaching approach involving both academic and vocational oriented personnel.
 - d. Encourage students to observe the relationship between academic and vocational skills during their visit to businesses of interest in the community.
6. Utilize individualized motivational systems.
 - a. Assist students in making arrangements for them to observe businesses of individual interest in the community.
 - b. Utilize student input when designing individualized instructional units for students to explore careers in various career clusters.
 - c. Promote open classroom discussion especially after students have returned from observing businesses of individual interest in the community.
 - d. Assist students in determining the needed components to meet their career goals.
7. Utilize career oriented materials.
 - a. Encourage students to do individualized research concerning careers that correlate with their interest and ability.
 - b. Encourage students to simulate a career of their interest for a class report.
 - c. Introduce careers within various career clusters to other team teachers.
 - d. Prepare bulletin boards and displays.
8. Utilize career oriented teaching methods.
 - a. Utilize the team teaching approach involving teachers from other disciplines.
 - b. Design "hands-on" learning activities.
 - c. Encourage students to interview resource people of the community.
 - d. Design instructional units involving interaction from community and school personnel.
 - e. Utilize the learning contract with students.

9. Design optimum career learning environments.
 - a. Provide an open and honest atmosphere for student learning.
 - b. Determine the career education needs and interests of the students.
 - c. Encourage students to assist in developing learning packets that will meet their needs and interests.
 - d. Encourage students to do research on their own to meet the requirements of the learning packets.
 - e. Permit small interest groups to work together in exploring careers of mutual interest.

10. Utilize decision making components.
 - a. Assist students in discovering their personal values and beliefs.
 - b. Assist students in exploring careers in various career clusters available to them.
 - c. Encourage students to assess where they have been, where they are, and where they want to go in the future.
 - d. Encourage students to make decisions pertaining to the career options that correlate with their personal values.

11. Design life oriented programs.
 - a. Encourage all educational personnel to promote all areas of total life for the students.
 - b. Provide education in decision making skills and problem solving skills within the self awareness and career exploration learning experiences.
 - c. Design educational programs to include each segment of society in the community.
 - d. Utilize simulation techniques while giving a demonstration in the classroom or in the lab.

12. Utilize career oriented library resources.
 - a. Locate career education centers in the school.
 - b. Develop units of instruction utilizing these materials to provide career exploration experiences centered around the career cluster concept.
 - c. Use as supplemental materials to existing instructional materials.
 - d. Encourage students to utilize these materials in doing individual research pertaining to various careers.

13. Design world of work learning activities.
 - a. Request resource people to bring actual tools and equipment used with their career when speaking to the class.
 - b. Develop activity oriented units of motivation that involve community-school interaction.
 - c. Encourage students to observe businesses of individual interest while exploring that respective career.
 - d. Utilize role playing techniques.
 - e. Utilize simulation techniques
 - f. Utilize field trips.

14. Implement self learning centers.
 - a. Ask for involvement from parents and businesses.
 - b. Plan the centers to meet the career awareness and self awareness needs of the students.
 - c. Evaluate the self learning centers in other schools.
 - d. Set up problem solving self learning centers.
 - e. Evaluate student performance periodically at each center.

Teaming Skills

1. Teachers participate with other school and community personnel in revising instructional programs.
 - a. Meet with department chairpeople to discuss the stated career education goals and objectives.
 - b. Cooperate with curriculum coordinator to determine the needs of the students as pertaining to the stated career education goals and objectives.
 - c. Assist in evaluating the available career education materials available for instruction.
 - d. Cooperate with curriculum coordinator in revising instructional units that are unduplicated among grade levels or various departments.

2. Provide active career education leadership.
 - a. Identify educational personnel interested in career education.
 - b. Cooperate with all education personnel in achieving the local goals and objectives of career education.
 - c. Design activity oriented learning experiences in an attempt to provide awareness, exploration, and preparation for career experiences.
 - d. Assist in defining career education for the local school system.

- e. Develop units of career oriented instruction emphasizing "hands-on" learning activities.
- f. Cooperate with the coordinator of school-community career oriented activities.
- g. Serve as speaker at community activities.

Utilizing Community Resources

1. Use community people as career education resource personnel.
 - a. Contact intermediate school district personnel.
 - b. Ask parents to explain their occupations.
 - c. Ask businessmen to explain their occupations.
 - d. Ask businessmen to allow students to observe the operation of their occupation for a short period of time.
 - e. Ask resource people to help stress the importance of good human relations.
2. Conduct career oriented field trips.
 - a. Define the purpose of the field trips.
 - b. Secure administrative approval.
 - c. Contact the people at the destination of the trip.
 - d. Explain the purpose of the trip and what should be discussed.
 - e. Motivate students prior to going.
 - f. Discuss the major components with students as a follow-up.
 - g. File valuable information.
3. Identify community career oriented resource personnel.
 - a. Involve students to help identify these people through visiting and interviewing sections of the community.
 - b. Talk with trade organization personnel.
 - c. Talk with civic organization personnel.
 - d. Talk with businessmen while doing personal business.
 - e. Utilize telephone yellow pages.
 - f. Utilize newspaper classified ads.
4. Identify employment procedures.
 - a. Involve students in identifying employment procedures.
 - b. Contact employers.
 - c. Contact personnel managers.
 - d. Contact personnel at local employment agencies.

5. Identify employment opportunities.
 - a. Contact employers in the community.
 - b. Contact United States Department of Labor personnel.
 - c. Contact state employment agency personnel.
 - d. Contact trade organization personnel.
 - e. Read newspaper classified ads.

Professional Development Skills

1. Develop interpersonal skills.
 - a. Use commercial resource materials to promote interpersonal skills.
 - b. Set a good example.
 - c. Provide an open and honest atmosphere for student learning.
 - d. Design student learning activities requiring the use of good interpersonal skills.
2. Utilize problem solving skills.
 - a. Make students aware of their abilities and interests.
 - b. Allow students to explore careers within various clusters.
 - c. Brainstorm with the students, various career options that would correlate to their abilities and interests.
 - d. Allow students to make their own selection of career options.
 - e. Design individual activity oriented learning experiences that require the student to solve problems.
 - f. Discuss with the students the career implications of the method selected to solve the respective problem.
3. Utilize career education in-service training.
 - a. Help develop career education goals and objectives.
 - b. Design individual units of instruction centered around the career cluster concept.
 - c. Assist students in planning their short and long range career education goals and objectives.
 - d. Assist students in evaluating career alternatives.
4. Identify occupational requirements.
 - a. Interview businessmen in the community.
 - b. Interview personnel managers in the community.
 - c. Request resource people to discuss the respective requirements with the class or small interest groups.
 - d. Go on field trips.
 - e. Encourage students to interview employees while observing businesses of individual interest in the community.

5. Expand world of work experience.
 - a. Talk to resource people in the community.
 - b. Go on field trips or tours.
 - c. Listen to resource people in the classroom.
 - d. Visit students while they are out in the community.
 - e. Utilize summer employment.
 - f. Attend university graduate classes designed to expand world of work experiences.
 - g. Attend business, industry, and education day at the school.
6. Define career education concept.
 - a. Evaluate the career education needs of the students.
 - b. Evaluate the entire community manpower needs.
 - c. Work with other educational personnel to determine what educational components are needed to match the student needs of the community.
7. Practice a career education philosophy.
 - a. Be aware of the implications of career education pertaining to the entire education of the individual student.

Action Research and Evaluation Skills

1. Promote student self evaluation.
 - a. Provide a non-threatening self learning atmosphere.
 - b. Discuss with the students where they have been and where they appear to be at the present as it pertains to self awareness and career exploration.
 - c. Make them aware of their apparent strengths as they pertain to various career options.
 - d. Have students question themselves in a non-threatening self learning atmosphere.
 - e. Help the students plan short range career goals and objectives.
2. Establish student feedback systems.
 - a. Provide an open and honest environment for student learning.
 - b. Evaluate how students respond, be it oral or written, as it pertains to self awareness and career exploration activities.
 - c. Encourage team teachers to use daily evaluative techniques.
 - d. Discuss with student the major components of the occupation after they return from observing businesses of interest in the community.

3. Evaluate career oriented curriculum.
 - a. Utilize pre- and post-evaluative techniques.
 - b. Utilize student feedback.
 - c. Correlate student performance with the goals and objectives of the curriculum.
 - d. Encourage supervision of students while observing businesses of individualized interest in the community to evaluate student performance.
 - e. Evaluate the daily comments as written on daily lesson plans by other team teachers.

4. Assess student's performance strengths.
 - a. Talk with team teachers.
 - b. Evaluate comments in student records on file.
 - c. Observe student performance.
 - d. Encourage supervisors of students while observing businesses of interest in the community to evaluate student performance.
 - e. Evaluate results from standardized tests.

5. Utilize instructional feedback information.
 - a. Utilize this information, be it brochures or a computerized printout, in small interest group discussions or research.
 - b. Allow students to browse through this material at their leisure in a career education center.
 - c. Integrate this information with instructional units designed for career awareness and career exploration purposes.
 - d. Encourage students to use this information in selection of career options that correlate with their interests and abilities.

6. Assess student performance handicaps.
 - a. Talk with team teachers.
 - b. Utilize parent conferences.
 - c. Observe student performances.
 - d. Evaluate comments from supervisors while student is out visiting places of interest in the community.
 - e. Evaluate results from standardized tests.

7. Use pre- and post-assessment techniques.
 - a. Utilize in evaluation of instructional units.
 - b. Utilize in evaluation of self awareness learning activities.
 - c. Utilize in evaluation of career exploration learning activities, i.e., individual visits to selected places of interest in the community.

APPENDIX C

RESOURCES

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APPENDIX I
CORRESPONDENCE



COMMONWEALTH of VIRGINIA

STATE DEPARTMENT OF EDUCATION
RICHMOND, 23216

July 29, 1975

Ms. Ruth Swann
College of Education
2096 Derring Hall
Virginia Polytechnic Institute
and State University
Blacksburg, Virginia 24061

Dear Ruth:

It was good to talk with you over the telephone the other day. I am excited about the project you are undertaking, and I know that it will advance the development of career education in Virginia and elsewhere.

I have talked with the coordinators of the career education projects in Bedford County, Carroll County, and Radford City. and with Mr. Garfield Jackson, an assistant to Ms. Ellen Poole, Director of the Petersburg Project. I explained your proposal to them, and all of them pledged their cooperation. Each of them promised to send copies of their in-service materials to you. I have enclosed a list of the pilot projects.

Here are some addresses from other states:

Mr. Robert V. Jervis
Director of Career Education
Anne Arundel County Public Schools
2644 Riva Road
Annapolis, Maryland 21401

Mr. Owen Collins, Project Director
Kentucky Valley Educational
Cooperative
EDD - Region 12
Career Education Program
Post Office Box 1118
Hazard, Kentucky 41701

Ms. Ruth Swann
July 29, 1975
Page 2

Lincoln County
Career Education Project
Lincoln County Board of Education
Hamlin, West Virginia

Mr. James Stuart
SPICE Project Director
Knox County Department of
Public Instruction
Knoxville, Tennessee

Mr. Jim Huguely
SPAN Project Director
Memphis City Schools
Memphis, Tennessee

I am not acquainted with any projects in North Carolina, but their
state contact person is:

Mr. C. Wayne Dillon
Consultant, Career Education
Room 222
Education Building
Raleigh, North Carolina 27611
(919) 829-3512

Cordially,

Robert L. Crawford, Ed.D.
Supervisor of Career Education

RLC/gw

Enclosures

Career Education Exemplary Projects

Mr. Larry Cornett, Director
Urban-Rural Schools Project
Wise County Schools
P. O. Box GG
Big Stone Gap, Virginia 24219

Career Education is included as an integral part of a total teacher education program in 3 elementary schools. Funded by Urban-Rural Schools Corporation.

Ms. Glenda Dalton, Director
Carroll County Career Education Project
Box 456
Hillsville, Virginia 24343

K-12 career education project with emphasis on guidance component. Title III ESEA funding.

Mr. Gary Kelly
Guidance Supervisor
Roanoke County Schools
526 College Avenue
Salem, Virginia 24153

K-12 implementation via guidance services and social studies curriculum. No outside funding aid.

Ms. Ellen Poole, Director
Career Education Project
Petersburg City Schools
Courthouse Hill
Petersburg, Virginia 23803

K-12 career education project. Formerly Part C funding, now funded by State.

Mr. Jerry Turpin, Coordinator
Bedford County Career Education Project
310 South Bridge Street
Bedford, Virginia 24523

K-12 career education project. Part D funding. Bedford County also is engaged in a Title III ESEA funded project to produce K-8 career education television programs.

Mr. W. Randall Wright, Coordinator
Career Education Project
Radford City Schools
1612 Wadsworth Street
Radford, Virginia 24141

K-12 career education project. Formerly Part C funding, now funded by State.

Mr. Keith Smith
Director of Career Development and Research
Delmarva Advisory Council
One Plaza East, Suite 400
P. O. Box 711
Salisbury, Maryland 21808

Career education is included as an integral part of efforts to provide occupational information and placement help for students of the Delmarva Peninsula. Funded through Vocational Education Divisions of Maryland, Virginia, and Delaware

2713 Mapleton Avenue
Norfolk, Virginia 23504
August 29, 1975

Mrs. Ella Kelly
Career Development Programs
National Institute Education
19 & M Street, N.W.
Washington, D.C. 20015

Dear Mrs. Kelly:

I am currently conducting doctoral research at Virginia Polytechnic Institute and State University on the in-service component of exemplary career education projects. Mrs. Katherine Cole of the Washington, D.C. School System, has suggested that I include you among my data collecting sources.

Any assistance that you are able to provide will be greatly appreciated. My primary focus is on in-service career education programs for middle school teachers. My ultimate goal is the development of a theoretical framework for planning career development programs for continuing teachers. Copies of program descriptions, curriculum guides, documents and instruction materials, setting forth goals, procedures, formats, materials, assessment tools, etc., employed in exemplary career education in-service programs will be helpful in developing a data-base for evolving the pragmatic components of the proposed framework.

Again, may I express my appreciation for any assistance that you may provide.

Yours truly,

Ruth Swann



DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
NATIONAL INSTITUTE OF EDUCATION
WASHINGTON, D.C. 20208

September 5, 1975

Ms. Ruth Swann
2713 Mapleton Avenue
Norfolk, Virginia 23504

Dear Ms. Swann:

Ella Kelly gave me your letter requesting information on inservice career education programs. Unfortunately, NIE has not yet addressed its full attention to inservice career education. Our funds having been limited, we have concentrated on supporting basic research in career development and on developing programs and materials that schools can adopt. Clearly, however, our next efforts should address inservice concerns and we are planning to do so in fiscal year 1977. I hope you will keep us informed of your work; it could be very valuable in the next 12 months as we plan new efforts in pre- and in-service teacher education.

We do have a few products that you might find helpful. I have listed them in categories below with the name of a person you can contact for further information.

- I. NIE products that can be used for several purposes including inservice education.
 - a. Learning Kit for Guidance Counselors and Counselor Educators to Aid in the Delivery of Sex Fair Counseling. Mary Lou Randour, NIE
 - b. Women at Work: A Three Part Counseling Series
Ivan Charner, NIE

Ms. Ruth Swann - Page 2

II. NIE programs which contain a staff development component.

- a. Experienced-Based Career Education. Ron Buchnam, NIE (In FY'76, staff development materials will be developed).
- b. Career Planning Support System. Bob Campbell, Center for Vocational Education, 1960 Kenny Road, Columbus, Ohio, 43210. (This project will be testing inservice modules in FY'76.)

The only other materials that may be of interest to you are the modules in a Performance-Based Professional Education Curricula which are being developed at the Center for Vocational Education in Ohio. However these are designed primarily for preservice use. Contact Don Findlay at the above address for Bob Campbell.

If I can be of further assistance, do not hesitate to get in touch.

Sincerely,

Robert I. Wise
Chief, Career Awareness
Division
Education and Work Group

cc: Ella Kelly
Ron Buchnam
Ivan Charner
Mary Lou Randour
Bob Campbell
Don Findlay

PETERSBURG PUBLIC SCHOOLS
PETERSBURG, VIRGINIA
January 29, 1976

Mrs. Ruth Swann
2200 East Terrace View
Blacksburg, Virginia 24060

Dear Mrs. Swann:

We have permission to proceed with assisting you in the development of a Career Education in-service teaching model. The scope of the assistance agreed upon is to provide a panel of fifteen professional educators (ten classroom teachers and five administrative, supervisory, and counselor types) for a presentation of the draft model and an interview consisting of a 10-item checklist and two open-ended questions. The approved date and time is February 11, 1976 at 3:15 p.m.

We are delighted to be able to assist you and look forward to seeing you.

Sincerely,

Garfield Jackson, Jr.
Resource Teacher
Career Education Program
Petersburg Public Schools
Petersburg, Virginia 23803

GJ:mp

Richmond Public Schools

301 NORTH NINTH STREET
Richmond, Virginia 23219

January 30, 1976

Ms. Ruth Swann
2200 E Terrace View Street
Blacksburg, Virginia 24060

Dear Ms. Swann:

Your request to conduct a group interview for purposes of collecting data for your study, "Blending Career Education Into the Middle School Instructional Program", has been tentatively approved pending receipt and approval of your interview questionnaire. We are interested in the questions which will be asked. When this requirement is fulfilled I am certain that we can give you permission to go ahead.

Mrs. Chewning has agreed to coordinate your project and will be ready to work with you when the approval is final.

Sincerely,

E. H. Gish
Director of Research

cc: Mrs. Chewning

EHG/pcs

Richmond Public Schools

301 NORTH NINTH STREET
Richmond, Virginia 23219

January 5, 1976

Mrs. Ruth Swann
2200 East Terrace View Street
Blacksburg, Virginia 24060

Dear Mrs. Swann:

Your response to our letter of January 30, 1976 has been received. We are satisfied with your interview schedule and hereby grant approval to proceed with your interviews.

Mrs. Chewning is prepared to assist you in your study. Best wishes.

Sincerely,

E. H. Gish
Director of Research

vhn

CC: Mrs. Chewning

2200 E Terrace View
Blacksburg, Virginia 24060
January 22, 1976

Dear

It was a pleasure talking with you today, and I am delighted that you will continue to assist me in the development of a career education in-service teaching model. As you may recall, the proposed publication, "Blending Career Education Into The Middle School Instructional Program: A Model Framework For Teacher In-Service Programs," is an outgrowth of my dissertation research.

The attached outline documents my research needs. In the course of the validation interview sessions, I shall use visual aids to present the characteristics of the draft model and the supporting framework to the validating panelists. In addition, a simple interview schedule will be used to solicit the panelists' reactions to the draft of the model framework. You will receive five copies of the draft model for your experienced career education persons prior to February , 1976, for review purposes.

Hopefully, the input obtained will provide judgement data for finalizing the product thereby enabling me to provide Virginia educators with a validated product which may prove valuable in in-service endeavors in a variety of situations.

Your time and interest in assisting with the development of this model are greatly appreciated. I feel confident that the information you provide will be valuable not only to me but also to all educators who wish to apply systematic procedures to in-service career educational instructional planning.

If you have questions, please don't hesitate to get in touch with me. You may reach me by calling (office) or (home).

Sincerely yours,

Ruth Swann
Doctoral Candidate

Outline of Study And Nature of
Assistance Requested

Title:

Blending Career Education Into The Middle School Instructional Program: A Model Framework For Teacher In-Service Programs

Purpose:

The ultimate goal of this study is to provide an in-service planning model by which classroom teachers can be prepared to select and utilize instructional materials and methods appropriate to the career developmental needs of middle school youth.

Request:

To collect model validation data via a group interview process. Approximately an hour will be needed with each group.

Persons to be Involved:

Fifteen professional educators (ten classroom teachers and five administrative, supervisory, and counselor types).

Local School System Contact Person:**List of Participants:**

Participants' names may be secured from local school system contact person.

Data Collecting Instrument:

An interview schedule consisting of a simple 10-item check list and 2 open-ended questions.

Date Set for Group Interview:

February , 1976, suggested by

Value of Study:

The model framework will extend the repertoire of validated career education staff development materials available to Virginia school systems

Availability of Results:

Complimentary copies of the model framework will be presented to school systems participating in the validation process around June 1, 1976.



COMMONWEALTH of VIRGINIA

**STATE DEPARTMENT OF EDUCATION
RICHMOND, 23216**

December 12, 1975

Ms. Ruth Swann, Doctoral Candidate
% Dr. Carl McDaniel, Chairman
Doctoral Committee
VPI & SU
Blacksburg, Virginia 24061

Dear Ms. Swann:

I apologize for my delay in answering your nice letter of November 26 but I have just returned to my office.

I shall be most happy to endorse your doctoral dissertation effort and will help you in any possible way, if you will let me know what other steps I might take. I feel sure that Dr. Carl Riehm, Assistant Superintendent for Instruction will be most receptive.

I enjoyed seeing you at the conference at University of Virginia and extend all good wishes.

Sincerely,

John R. Cook
Supervisor
Guidance Services

JRC:jlc



COMMONWEALTH of VIRGINIA

**STATE DEPARTMENT OF EDUCATION
RICHMOND, 23218**

January 20, 1976

Ms. Ruth Swann
Doctoral Candidate
VPI & SU
Blacksburg, Virginia 24061

Dear Ruth:

Thank you for your letter of January 12.

I will be delighted to talk with you concerning the endorsement of your study and, after seeing the draft model I hope Dr. Riehm and I may look favorably upon it.

When you get to Richmond give me a call so that we might discuss this.

All good wishes to you and Dr. McDaniels.

Sincerely,

John R. Cook
Supervisor
Guidance Services

JRC:jlc

cc: Dr. Carl McDaniels
Chairman, Doctoral Committee

2200 E Terrace View
Blacksburg, Virginia 24060
February 9, 1976

Dear

I would appreciate your circulating the copies of the draft of my career education in-service teaching model among the participating teachers for their review prior to my visit. Please instruct the participants to pay particular attention to pages 49-77. Reaction questions will be directed toward pages 60-64--which are explained on pages 49-59 and 65-77. Other important pages to note are 40-48.

Thank you for your continued help in this effort.

Sincerely,

Ruth Swann

wls

2200 E Terrace View
Blacksburg, Virginia 24060
February 23, 1976

Dear

This letter is to tell you that the courtesy shown to me during my field-testing activity in your school system on February was something I shall never forget.

The contributions made by the validating panelists of administrators, counselors and teachers strengthened my endeavors to make a viable contribution to career education in-service technology.

For your support, I am deeply grateful. You may rest assured that a revised copy of the model framework will be sent to you around June 1.

Sincerely yours,

Ruth Swann

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BLENDING CAREER EDUCATION INTO THE MIDDLE SCHOOL INSTRUCTIONAL
PROGRAM: A MODEL FRAMEWORK FOR TEACHER IN-SERVICE PROGRAMS

by

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(ABSTRACT)

This study reported on the development and validation of a model framework to prepare in-service teachers to blend career education into on-going middle school instructional programs.

Three research procedures were undertaken in the development of the model: review of the literature, from which a draft model was constructed; formative evaluation of the draft model; and revision of the draft model on the basis of the formative evaluation data.

The literature research brought together developmental philosophy, career development theory, and teaching/learning strategies, and focused them on the career development of middle school youth and teachers in classroom settings. Thereby, a draft model was provided to help educators to identify and give priority to concepts in the body of knowledge unique to their subject matter area, establish behavioral objectives; define and prescribe learning experiences for self and students; prepare materials; obtain equipment and supplies; create the teaching aids and climate essential to total person development in a total career education sensitive curriculum.

Strong interest was manifested in having industrial/business and government/work knowledge tours included in in-service practices.

The application of teacher-centered, class-centered and self-directed learning structures were conceptualized; the salient character of each style and its value as a career education instructional strategy was gaining appropriate recognition.

Organizational structures and processes appear to be contingent upon the nature of the people in the organization and encompassed varying dimensions of elements and linkages in organizational support structures and bureaucratic, collaborative and coordinative leadership styles.

A preference exists for research and career education which provide mechanics for producing results rather than in comparison to presentations allowing for generalization to be drawn from technical reports and scholarly narratives.

A strong need is felt for structures which provide a more basic group of career education in-service elements, instructional strategies and program development approaches.

The in-service model presented by the investigator for validation represented a significant contribution to in-service at all levels, managerial tools and career education practices, principles and strategies.

Finally, and perhaps the most rewarding of the obtrusive indices was the opportunity afforded the investigator to work with the types of professionals and school systems one could expect to work with as a staff development consultant or a career education specialist.