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**ABSTRACT**

This document describes the characteristics of a comprehensive approach to program development in guidance, counseling, placement, and follow-up programs. A comprehensive approach to program development employs a systematic planning model and related process that is derived from the scientific method aimed at development, implementation, evaluation, and revision of guidance programs. It features a process in which each phase provides feedback to preceding phases or input to subsequent planning activities. The set of programs that results is systematic; that is, each part is interrelated, and interacts with the others. Each resulting program focuses on the needs and characteristics of youth from which measureable objectives emerge. The approach is comprehensive because it includes both a developmental phase to prevent potential problems and a prescriptive phase to alleviate existing problems. Also included is a detailed outline of a four-phase comprehensive approach that might be considered for developing each program. The four phases are planning, structuring, implementing, and evaluative decision making. (Author)

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**YOUTH DEVELOPMENT RESEARCH PROGRAM**

The Logics of Planning  
Career Guidance, Counseling, Placement, and Follow-up Programs

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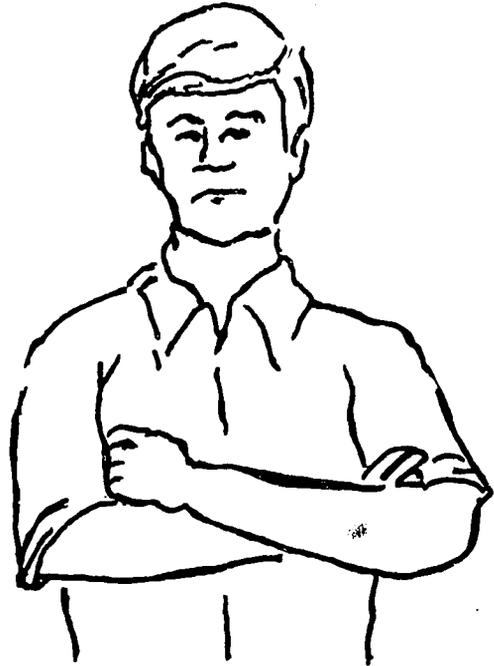
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## THE DILEMMA OF GUIDANCE, COUNSELING, PLACEMENT, AND FOLLOW-UP PERSONNEL

Very seldom are guidance, counseling, placement, and follow-up personnel able to respond effectively to the crush of demands made upon them. The following three statements, made by high school students, highlight some of the difficulties typically faced by such personnel.

"All my counselor has ever done for me is to change my schedule and fix my computer registration cards."



This illustrates the problem that can be called "the maintenance syndrome." A counselor can easily spend all his time dealing with routine, not pressing tasks and leave no time to adequately plan a guidance program, let alone properly carry it out and evaluate it.

"My counselor only has time to see students who get in trouble. I've talked to him only once in almost two year."



Counselors who have time only for problem students are forced into a crisis orientation to guidance. They attempt to solve a student's problems only after these problems have become critical. By providing only remedial attention to students with obvious difficulties, they fail to deal with the development of the majority of students whose needs are equally legitimate, if less salient.

"Why should I study English?  
I want to be an engineer,  
not a poet."



When guidance activities are isolated from the regular instructional process in the classroom, students often fail to see that their school studies can be related to achieving their life goals. Not perceiving the task of learning as significant and necessary, they become bored with school subjects.

Student statements such as these are serious indictments of guidance, counseling, placement, and follow-up programs and systems characteristic of today's schools. Sometimes such programs suffer from faulty planning, allowing programs to emerge without a clear set of goals and objectives based upon the important needs of most of the youth; sometimes the structuring of such programs fails to specify target groups and immediate objectives, and to select appropriate, feasible procedures. Often the implementation phase falters because staff members lack certain required competencies, and at times programs have not built in decision-making procedures based on impact data which will suggest future directions and re-direct a program which goes off course.

## ALTERNATIVE APPROACHES TO PROGRAM DEVELOPMENT

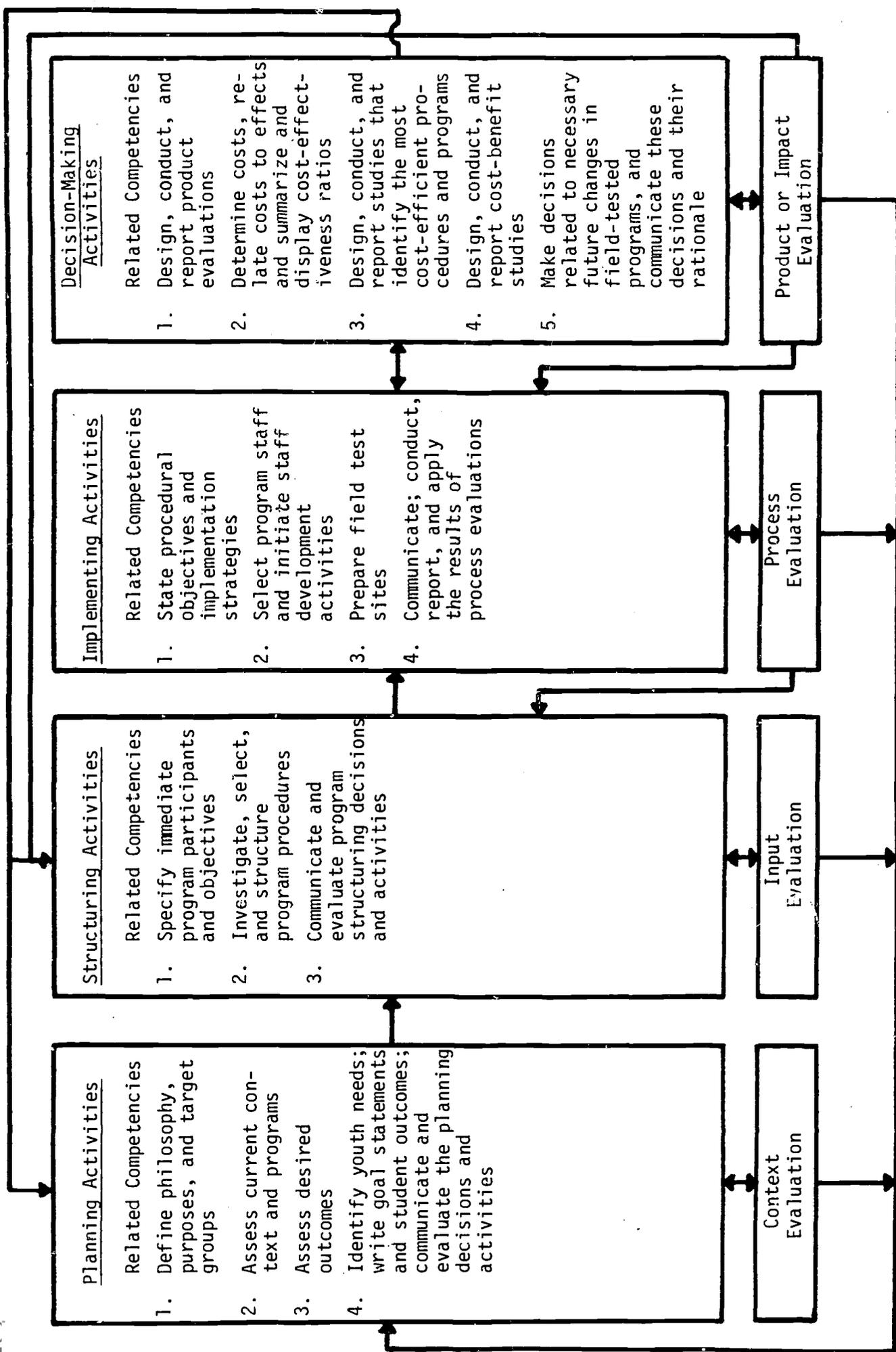
The diagram on the next page outlines the important principles and parts of the comprehensive approach to counseling, guidance, placement, and follow-up. A number of other approaches have been used in order to meet the needs reflected by the student statements cited in the previous section. Unfortunately, some of these approaches create as many problems as they solve, and have attracted the strong criticism which is currently heaped upon counseling, guidance, placement, and follow-up programs. What are some of these approaches?

The Intuitive Approach is often reflected by programs based upon the hunches or intuition of a dominant member of the department. This individual may well have a good sense of the needs of students, but his intuitions don't necessarily keep pace with changes in student needs. Furthermore, if he leaves the department, it finds itself without a central direction and may continue to depend on the hunches of those less skilled. At best, it is a most indirect approach to building a program responsive to students.

The Crisis Approach is one in which students receive help only when their problem has developed into an emergency. Some counseling personnel thrive in this hectic atmosphere while others can't stand the emotional wear and tear. But, more importantly, a crisis atmosphere is not always the best climate in which a young person can make rational decisions. Such an approach drains too much time and energy from the staff to allow them to give attention to developmental programs which could prevent a number of the crises which confront them.

The Non-Evaluative Approach supplies all the necessary ingredients of a successful program but evaluation. Often the rationale offered is, "We're too busy to evaluate." Thus, while the rest of the program may be firmly based on data, the evaluation consists of hunches that "The kids seem happier," or "Things seem to be going more smoothly." The lack of evaluation makes it difficult for such a program to claim that accountability is one of its features.

THE COMPREHENSIVE APPROACH TO DEVELOPING GUIDANCE, COUNSELING, PLACEMENT, AND FOLLOW-UP PROGRAMS, AND RELATED COMPETENCIES



The Action Approach is often characterized by more of a concern with means rather than ends. Thus, innovations, be they drug crisis centers, a new use of the inquiry technique or a student town hall, may be eagerly established without sufficient planning or evaluation.

A Comprehensive, Developmental Approach. While each of the above approaches does have some beneficial aspects, a more comprehensive approach, as outlined on the preceding page and detailed in the following section, may be able to capitalize upon the good points but eliminate some of the negative features which have been mentioned.

#### DEFINITIONS BASIC TO A COMPREHENSIVE APPROACH

This document's definitions of guidance, counseling, career, career education, and placement and follow-up contrast with traditional use of these terms. Guidance is the generic term. It includes instruction, counseling, placement, follow-up, evaluation, and support procedures based on youth career planning and development needs. Guidance signifies the total content and process of programs aimed at helping students develop and protect their individuality and potential. This process aims at helping "each student be a problem solver" (planner, decision-maker, implementer) in each career area. On the other hand, counseling is an interpersonal procedure providing one alternative for helping youth achieve guidance-related objectives. Here, counseling personnel (i.e., counselors, teachers, paraprofessionals, school psychologists, etc.) interact with students individually or in groups in order to facilitate youth career planning and development. If these terms are defined at all in conventional guidance programs, the word guidance often has negative connotations (including authoritarian advice-giving and prescriptions of problem solutions), is given a very limited conceptualization, or is not clearly differentiated from the term counseling.

The concept of career encompasses a variety of possible patterns of personal choice related to each individual's total life style. Thus, a comprehensive career guidance program assists youth to set life or "career" goals in these areas: (1) occupations, (2) education, (3) personal and social behavior, (4) learning how to learn, (5) social responsibility (i.e., citizenship) development, and (6) leisure time use. Conventional guidance programs often limit the definition of career to only educational and vocational choices.

This broad definition of career leads to a concept of career education which encompasses all areas of youth development. This orientation allows and encourages the fulfillment of a broad range of youth needs; it is contrasted to conventional systems in which priority attention is directed only toward preparing youth for their future educational and vocational experiences, therefore reflecting a limited and fragmented view of youth development. Career education provides instruction and individual planning and development assistance tailored to each youth's personal characteristics, background, needs, and career goals. Career education, therefore, is a combination of career guidance and career instruction and training, using career in the broad sense just defined.

In this document, placement and follow-up are considered to be integral parts of a set of comprehensive career guidance services. However, they are not limited to the vocational and educational aspects of careers. Such services must be available for all areas of careers. This more inclusive definition of placement and follow-up stresses providing assistance whenever youth make a transition in school (e.g., from one academic level to another) or upon leaving school (e.g., early leaving or graduation). In addition, follow-up services must entail more than data collection on students who have received placement assistance. Follow-up help should be provided so that youth maintain the career development progression that was in effect before they were placed.

#### CHARACTERISTICS OF A COMPREHENSIVE APPROACH

It employs a systematic planning model and related process that is derived from the scientific method and aimed at the development, implementation, evaluation, and revision of guidance programs. It features a process in which each phase provides feedback to preceding phases or input to subsequent planning activities. The systematic planning approach contrasts with typical guidance programs in which certain important phases (such as evaluation) are often omitted, or others (such as implementation) are overemphasized.

The set of programs that result is systematic; that is, each part is inter-related and interacts with the others. For example, placement and follow-up programs are often poorly integrated with career planning and development programs. This interrelationship not only should exist, it should be

extensive, committed to paper, and accompanied by a rationale. Without such a statement it is difficult to understand either the derivation of each guidance program or why certain programs have been assigned a high priority.

Each resulting program focuses on the needs and characteristics of youth. This youth-based orientation means the approach assesses needs of youth and translates them into measurable objectives. It is upon these needs and objectives that priorities for the design, structuring, implementation, and decision-making of all guidance interventions are based. In contrast, conventional guidance approaches often emphasize means rather than ends, never systematically determining the needs of the youth served. They perpetuate and expand the current system whether or not it has been shown that the system is doing a good job of helping youth.

It is comprehensive in that it includes both a developmental phase to prevent possible problems and a prescriptive phase to alleviate already existent problems. Interventions may be either direct or indirect. Additionally, comprehensive guidance programs seek to give attention to long-range as well as immediate youth needs, and to all areas of behavior, not only to a youth's educational and vocational choices.

The approach described above is an ideal one; not everyone will be in a position to start from scratch and design such a program. However, if it is one toward which a school or district wants to move, the following four sections outline aspects of a suggested comprehensive approach that might be considered for developing each program.

## PHASE 1: PLANNING CAREER GUIDANCE PROGRAMS

### DEFINING PHILOSOPHY, PURPOSES, AND TARGET GROUPS

The logical beginning point for programs is the consideration of their general purpose. This means not the specific outcomes of a program but the broad needs it will address. An example product of this activity is provided by these six basic assumptions:

1. Guidance services must help develop and protect students' individuality.
2. Guidance must help students become effective problem solvers.

3. Guidance services should be available to all students.
4. The guidance procedure should be integrated with the education process.
5. Guidance should be developmental as well as prescriptive or remedial.
6. Counseling personnel must be able to evaluate their own effectiveness.

From assumptions such as these, one can move to a listing of the specific purposes of each program and to identifying key groups from the school and community which should be involved in planning in more detail each proposed program. At this stage one may even want to select representatives to participate in advisory panels for planning, implementing, and evaluating each program. Potential recipients of each program should be represented.

A part of defining the philosophy and goals of a program involves defining the target groups. One needs to identify the numbers and characteristics of youths who will be served by each program. The descriptions can include age, sex, ethnic groups membership, socioeconomic background, ability range, and individual characteristics.

### ASSESSING CURRENT STATUS

Program planners must consider both the desired outcomes and current status of students' career planning and development in the six career (or life) areas earlier cited. The desired outcomes (discussed in more detail below) describe the direction in which student development should occur, while the current context evaluation determines where they are now. The discrepancies between desired outcomes and current status define how far they need to travel in order to get them there.

Among the baseline data to be gathered are the following:

- . the general characteristics of the context in which each program will operate
- . the current status of present guidance, counseling, placement, and follow-up programs related to school system needs
- . the current status of present guidance, counseling, and placement programs related to societal needs
- . all objectives and activities that make up current programs in this context

Much of this information on the current status of programs may be gathered from and by counseling personnel, based both upon their recall and the keeping of logs which reveal how much time they spend upon which tasks, and for what outcomes.

It is often more time consuming to assess the current status of students themselves. This could include the use of survey tests of knowledge, situational tests of current behavioral abilities, and attitude inventories. One such measurement tool is an Occupational Knowledge Survey which assesses students' knowledge of: the world of work; occupational families; various occupations, including prerequisites for entering them, basic salary levels associated with them; and other factors. Data from current status assessments may be used in connection with desired student outcome assessment data to design guidance programs for specific student target groups.

#### ASSESSING DESIRED OUTCOMES

For each of the six career areas it is possible to ascertain what outcomes students would like to achieve and what outcomes parents, counselors, teachers, administrators, community representatives, and others recommend for youth. At this level of program development, the primary purpose of this assessment strategy is to furnish an empirical basis for deciding which programs to emphasize in a particular school setting, rather than to diagnose the career planning and development needs of individual youths.

A number of alternative strategies are available to effect this desired outcomes assessment. The most desirable involves gathering responses from students themselves. A useful method that meets this qualification is the small-group card sort administered in a small-group interview. For the various areas, a list of possible outcome statements was developed on the basis of data obtained primarily through a literature review and student and staff interviews. Each outcome statement, written on a separate card, described a level of personal functioning for which a given youth might feel a need to strive. A deck of approximately 30 card statements for each area was thus developed for youth and adult reactions. This allowed youth and adult respondents to consider each individual statement rather than dealing with all statements at once.

Where time and circumstances do not permit use of a variation of the above approach, alternative assessment techniques must be explored. For example, a conference might be held involving selected teachers, counselors, and administrators. Based on their experience at school, these individuals could make "educated guesses" about the desired outcomes of their students.

Assessing desired outcomes avoids the deficiencies of the more traditional needs assessment techniques. These deficiencies include: emphasizing the "means" rather than the "ends" of career guidance programs; using data gathered from individuals after they have left school, which is usually of an abstract nature and without specific program implications; or questioning youth about their complaints rather than identifying the positive directions in which they wish to move. The essential difficulty of most traditional approaches to the assessment of student needs is that they do not expedite the development of guidance programs by suggesting positive directions which can be used to draft measurable objectives for student development.

A school or district may then organize task forces through which relevant school personnel and students use the data to help make decisions about which student outcomes should provide the basis for guidance program planning. When these outcomes have been specified, program planners can formulate needs statements: statements which specify the discrepancy between current status and desired outcomes.

#### DEVELOPING GOAL STATEMENTS AND STUDENT PERFORMANCE OBJECTIVES

Needs statements can easily be translated into goal statements. If students specified that they want to read better, and if the current status assessment revealed that a significant number of students are reading a year or more below their grade level, the need level may have been: "Students need to have a level of reading skill equal to that of the nation-wide average for their grade level." This level of achievement could become the goal of a student program.

Writing goal statements leads to the second a more difficult task of writing "performance objectives" for each goal statement. These objectives incorporate descriptions of the things which will indicate exactly when a student has achieved a goal. To write a performance objective, program planners must

answer the question: What acts should a student be able to perform as evidence that the goal has been reached? Such "acts" require a performance which demonstrates a skill, a knowledge, or an attitude. To be understandable, the conditions (that is, given what resources or cues) under which the student will be asked to perform these acts must be explicit, and the amount of evidence required (how many times, what percent of the time, how often) must be stated. A performance objective, thus, tells the student what he should be able to do, under what conditions, and how much or how often he should be able to do it. In writing these performance objectives, a task force may decide to review data banks of available objectives.

It would be dangerous to get bogged down at this relatively early stage by worrying too much about the measurability of objectives, a stumbling block to many people not used to working in such terms. Thus, it may be a good idea to leave until the next phase ("structuring programs") the specification of the evidence required; at this point, the most important thing is stating the performances students will have to evidence.

All groups of related goals and objectives must be systematically sequenced. A recommended sequence begins with youth collecting and comprehending relevant information, synthesizing information from diverse sources while making decisions based on this integration, and acting on the basis of these decisions. A paradigm that we have found useful in employing this sequence is summarized on the next page.

If separate task forces have been working with the desired outcome assessment data and have arrived at goal statements and performance outcomes for separate grade levels, or groups of grades, some exchange must take place among the various task forces in order to obtain a flow or "developmental sequence" from the elementary grades through junior high and into senior high school. If two grade levels have identified the same top priority need, decisions will have to be made about exactly where this need would be most appropriately addressed. Within a school district, the optimal condition of a developmental guidance system is to have a smooth flow of guidance programs across the various grade levels to preclude duplication.

Once any such coordination issues have been worked out, it will be possible to come up with an approved, written summary of all goal statements and

General Process Skills

- A. Planning Emphasis--decision making and performance activities involved are in these problem-solving behaviors but the emphasis is upon using a planned approach to understanding the problem and gathering information on it in order to expedite subsequent problem-solving activities.
- B. Decision-Making Emphasis--planning and performance activities are involved in these problem-solving behaviors. Planning skills are ones which are particularly important following the decision-making activities implemented here.
- C. Implementation Emphasis--activities here involve what has been referred to as "student managed performance." However, decision making (relative to evaluating one's problem-solving behavior) and planning (relative to revising or changing plans for implementation) are both involved in these activities.

Specific Problem-Solving Behaviors Grouped by Behavioral Skill Areas

1. Perceiving, delineating, and committing to work on, the problem.
  - a. Perceiving a personal problem when it exists.
  - b. Inhibiting the tendency to respond impulsively, passively, or by avoiding the problem.
  - c. Stating the conditions that would exist if the problem were resolved.
  - d. Specifying discrepancies between current personal status and those levels that would exist if the problem were resolved.
2. Searching for, evaluating, and utilizing the information.
  - a. Formulating a strategy for searching for information relevant to the problem.
  - b. Knowing and evaluating sources of information.
  - c. Efficiently utilizing the sources of information.
  - d. Evaluating the reliability and accuracy of information received and its relevance to the problem.
  - e. Being willing to consider new information relevant to the problem even when it conflicts with that presently held.
3. Generating and considering multiple alternative problem solutions.
  - a. Generating several viable courses of action or alternative solutions to the problem.
  - b. Knowing possible outcomes associated with each alternative.
  - c. Calculating the subjective and objective probabilities of each outcome's occurrence.
  - d. Using some personal standards or criteria for determining the desirability of possible outcomes.
  - e. Considering each alternative in light of the information gathered on its possible outcomes and in relation to the conditions that would exist if the problem were resolved.
4. Selecting the most desirable alternative problem solutions and formulating plans for implementing these alternatives.
  - a. Knowing and considering various rules or philosophies for selecting an alternative problem solution.
  - b. Selecting a preferred alternative problem solution to be implemented and knowing the rationale for the choice of this alternative.
  - c. Selecting, and knowing the rationale for the selection of, a second alternative problem solution to be used in case certain contingencies arise thwarting implementation of the first choice alternative.
  - d. Detailing a plan for carrying out the preferred alternative problem solution.
  - e. Knowing some conditions under which the second alternative problem solution might be implemented.
5. Implementing specific plans related to selected alternatives.
  - a. Until such time as other plans appear more appropriate, exhibiting the behaviors necessary to implement the plan for the chosen alternative.
  - b. Correctly judging whether the plan of implementation should be modified, or replaced with a plan for implementing the second choice or other alternative.
  - c. Implementing a plan for the second or other alternative as a result of information collected while acting on the preferred alternative.
6. Analyzing the process and product of problem solving.
  - a. Ascertaining if the problem has been satisfactorily solved by comparing present conditions with those previously specified for problem solution.
  - b. In terms of the model presented here, analyzing the positive and negative aspects of the behaviors emitted during the problem-solving process.
  - c. In terms of the previously specified conditions for problem solution, analyzing the positive and negative aspects of the solution and the results of the problem-solving process.
  - d. Knowing what has been learned (i.e., principles and techniques) that will be of help in future problem contexts.
  - e. Applying these principles and techniques to future problems when appropriate.

student performance outcomes for each proposed, guidance, counseling, placement, and follow-up program.

### COMMUNICATION AND CONTEXT EVALUATION

Many of the procedures mentioned in this section, such as the polling of adults and youths and the establishment of task forces, reflect the importance of communicating with and involving a wide variety of people in the program planning process. Their input can be valuable not only because it supplies the planner with a variety of viewpoints, but also because those who are significantly involved in the planning stage are more likely to feel committed to the success of such programs during their later stages.

The planning phase is accompanied by context evaluation, which assesses the effectiveness, efficiency, and desirability of the planning activities which have been described. That is, input is constantly sought and used while plans are being formulated. Since the desired outcome assessment will form the basis for preparation of goal statements, and these in turn will determine the actual processes and activities to be implemented subsequently, it is important to monitor the planning phase closely and assure a high quality effort. In this way, continuous formative evaluation is provided and a secure foundation for each program is built.

### PHASE 2: STRUCTURING CAREER GUIDANCE PROGRAMS

The structuring of programs includes specifying which programs will be implemented first, who will receive them, assessing resources, and specifying and selecting materials and activities to help students achieve their objectives. This phase also includes continued communication and evaluation activities-- in this case, focusing on the program structuring process. It begins with a previously derived list of goal statements and related performance objectives tied to needs which already have been ranked in the order of their importance. This ranking may help to select the prescribed programs to be implemented, but it must also be reconciled with what is feasible. This process consists of examining what is possible, what is appropriate, and what is feasible.

## SPECIFYING IMMEDIATE PROGRAM PARTICIPANTS AND OBJECTIVES

At this point it is appropriate to more specifically state the target population for each proposed program. The grouping and organizing of the various goals and objectives should now also facilitate identification of which objectives go with which programs, and the writing of measurable objectives. This refinement of the objectives should be done so that each objective specifies: the target person; the observable desired outcomes; the conditions for testing, training, or real-life performance; and standards of performance. Inasmuch as the weight of structuring and evaluating programs rests on these objectives, their quality is crucial. It is almost impossible to over-emphasize the importance of producing precise, measurable, well-defined objectives.

Each objective then states what the student will be able to do, following his completion of the prescribed instructional and counseling activities. To be able to specify the most relevant activities and materials, program staff must now gather baseline data relative to the current status of each program participant's career planning and development skills. This is especially important in individualized programs and requires the ability to design, conduct, and report the results of criterion-referenced tests.

## INVESTIGATING POSSIBLE PROCEDURES

The planning of activities to help students achieve a particular performance objective requires a broad survey of instructional and counseling procedures to insure that program planners do not overlook an alternative that could prove to be useful, as well as to avoid the pitfall of "reinventing the wheel" when adequate procedures already exist.

## SELECTING APPROPRIATE PROCEDURES

Given such a broad choice of possible procedures, the question is: "How do I decide which procedure to use to help students attain a particular performance objective?" Two types of techniques can be used to identify the instructional and counseling procedures most appropriate to each performance objective:

1. Techniques that enable the student to perform in a manner most closely resembling the performance called for by the objective. If the objective has been carefully developed, it will indicate what a student needs to learn or do. Some objectives may describe a complex skill for which students must learn a series of component behaviors, while others may adequately describe an entire skill. When the type of performance desired is clearly specified in the objective, it becomes possible to identify the general procedure or combination of procedures appropriate for reaching the objective.
2. Techniques that most closely resemble the conditions called for by the performance objective. If the objective has been adequately developed, it will not only suggest the major type of performance but will also suggest conditions under which performance will be expected to occur.

Once an array of alternative instructional and counseling procedures have been identified, they should be ranked according to how likely it is that each will promote student achievement of a given objective. Information on the conditions under which students in a particular school setting learn best, including reactions from students in the key target populations, is required here.

### SELECTING AND STRUCTURING FEASIBLE PROCEDURES

Another activity entails selecting among available procedures on the basis of administrative criteria. The most appropriate techniques are not always available, nor are they always practical or within a school's budget. Here is a list of steps to consider in selecting procedures that can be implemented from among those that are appropriate:

1. Identify the instructional and counseling procedures that counseling personnel already have available in the target school setting.
2. List the instructional and counseling procedures that are not currently available in the target school/district setting but which are available either from commercial or non-profit organizations.
3. Isolate locally or commercially available procedures that could be made appropriate through adaptation.

4. Itemize the procedures that are not available locally or commercially and, therefore, would need to be developed.
5. Select the procedures that are most practical on the basis of the target school or district's budgetary constraints.

### CHOOSING ALTERNATIVE MODES

Procedures can be employed in various modes: with a full class, a small group, or with individual students. Each mode has advantages. Full class counseling activities allow many students to benefit from the presence of one counselor. They may also be easy to administer, as students work through a lesson or activity in unison and produce results that can often be checked by the counselor with the entire group. The disadvantage of this mode is that it fails to allow for individual differences among students and lacks the flexibility of individually packaged activities.

Individualized activities can be entered by students at various levels of capability if a means is provided to allow them to determine their level of proficiency. Placement tests, self-assessment by the student (coupled with appropriate proficiency tests), and card-sort techniques like the one described earlier can all be used for this purpose. In addition, individualization usually increases flexibility.

Program planners need to stay alert to the many possibilities available in starting guidance, counseling, placement, and follow-up programs. Investigating possible procedures, selecting appropriate and feasible ones, and choosing among various modes all can contribute to an effective comprehensive approach to program planning.

### COMMUNICATION AND INPUT EVALUATION

The structuring process benefits from the participation of a wide variety of people, particularly if they perform specialized functions based upon their experience and expertise. Particular skills crucial to this phase include listing behavioral objectives, identifying target populations, investigating and selecting various procedures, and communicating formally and informally with appropriate personnel.

Structuring is accompanied by input evaluation, which monitors and assesses the effectiveness, efficiency, and desirability of each of the tasks described in this segment of the orientation. Such evaluation would include assessing the criteria used in the development of student materials, gauging whether materials adequately address the goals and objectives to which they are related, and examining the costs and effectiveness of materials development.

### PHASE 3: IMPLEMENTING CAREER GUIDANCE PROGRAMS

Once the goals and objectives of career planning programs have been translated into activities and materials, students must be given ample opportunities to work toward the outcomes they desire. This occurs during the implementation phase of guidance, counseling, placement, and follow-up programs.

#### STATING PROCESS OBJECTIVES

Even if extreme care and much attention have been lavished upon the preparation of student materials and activities, the true test of their effectiveness will, of course, be how well they work for students. Thus, it is desirable to pilot test any program with a small but representative sample of the target population. After necessary modifications are made, the programs may be implemented on a larger scale and again evaluated for effectiveness. The tasks that program implementers should accomplish may be listed in the form of process objectives. They spell out what staff members have to do to insure that students achieve their performance objectives. More detailed statements of what must be done by staff members are often referred to as implementation strategies.

There will probably be several process objectives for each product objective, and even more implementation strategies. While writing all of these out may be somewhat laborious, it is worth doing. It provides an implementation blueprint and schedule which can be shared with all concerned so that they know exactly what will happen and when. It also makes it easier to delegate tasks and hold people accountable for their performance--it becomes much more

difficult for anyone to say that, "I thought Charlie was supposed to do that" or "I didn't know when this was to be finished." Finally, it can be discussed when staff members report to administrative bodies or to the public, or when others wish to replicate a program. Process objectives and implementation strategies can be generated to cover all phases of implementation.

### SELECTING AND DEVELOPING PROGRAM STAFF

The listing of what needs to be done makes it possible to analyze what particular competencies the staff needs in order to successfully fulfill the process objectives. The implementer should be able to specify which tasks might best be done by machines (e.g., mass scoring of tests) and which should be done by individuals (e.g., one-to-one counseling). Sometimes special machines will have to be ordered or leased. Likewise, sometimes the staff will need to develop additional competencies, perhaps through in-service training. Competency-based training programs can be ordered or made to order for staff needing them. Again, this calls for advanced planning so that staff members have time to prepare for participation in the new program. At other times, it will be more expedient to add paraprofessional or professional help to the staff as needed.

AIR has drafted a domain of administrative and counselor competencies fundamental to the design of guidance, counseling, placement, and follow-up programs. This domain spells out just what skills and abilities are needed to effectively carry out each phase of the program development process summarized in this document. A condensed version of this domain is attached here as Appendix A. Working from this domain of competencies, AIR and the Mesa (Arizona) Public Schools are now engaged in producing competency-based staff development packages for providing the desired skills. Each package includes the following elements:

- . Tape-slide introduction
- . Flow chart of the comprehensive approach
- . Package goals and objectives
- . Instructional materials (module)
- . Progress checks
- . Group activities
- . Simulation activities

- . Application procedures
- . Post-tests
- . Further references

Each package is designed so that trainees may work at their own pace but it should not take over 15 hours to complete the package's activities.

### CONDUCTING FIELD TESTS

When staff members have the capabilities to conduct a field test of proposed guidance programs, it is possible to proceed with the following steps:

1. Identify criteria for student sample selection.
2. Identify school sites which are willing to participate in the field test.
3. Design evaluation instruments and procedures which measure both the intended and unintended outcomes of the field test.
4. Specify field test costs.
5. Arrange and implement the field test.
6. Analyze, report, and make recommendations based upon field test results.

Although all of the above steps are important, perhaps one of the most crucial is number 3. Since the field test results will probably have major impact on the course of the full-scale program, the field test evaluator will want to review evaluation instruments and techniques such as observation, unobtrusive measures, end-of-unit proficiency tests, criterion-referenced survey tests, attitude inventories, questionnaires, reaction sheets, interview formats, and case study techniques. He will also want to keep track of exact cost and time allocations. With the results of such data from a field test, it becomes possible to itemize and price all staff services (counselors, teachers, aides, volunteers, and others) required to implement the full program. The aforementioned task forces can then review this list of requirements in light of information furnished by administrators or budgetary and other constraints, and work with program staff to come to a satisfactory compromise.

### IMPLEMENTING PROGRAMS

The carrying out of field tests serves as a small-scale rehearsal for actual program implementation on a broader scale, for most of the steps carried out in the field tests will be repeated in slightly different form. In summary, these steps are:

1. Developing process objectives which describe what staff members must do in order to help bring about the desired student objectives.
2. Selecting and designing evaluation procedures, instruments, costs, and schedule to measure the attainment of objectives and the occurrence of unexpected outcomes.
3. Selecting and enlisting the support and cooperation of appropriate personnel at each site.
4. Training personnel to implement each program.
5. Monitoring and coordinating the achievement of the process objectives (through student and teacher activities) and the program evaluation.
6. Providing input and feedback (during and following implementation) to all concerned with each program.

### COMMUNICATION AND PROCESS EVALUATION

Communication in the implementing phase is particularly crucial, as effects of each program begin to reach clients and cause concrete change. Each of the activities in this phase requires special communication skills: process objectives must convey clearly the behavior entailed; program staff must be selected judiciously and tactfully, and their cooperation must be won through a clear explanation of the advantages of each program; field tests require careful articulation and communication; and the actual process of implementing each program requires extensive input and feedback between planner and implementers throughout. Effective communication is a must in this phase.

Process evaluation in a comprehensive career guidance system is intended to furnish regular feedback to program planners who are responsible for designing and implementing program plans and procedures. The purposes of process evaluation are threefold: (1) to monitor the implementation of guidance programs, (2) to supply information required for decisions which have to be made during the program implementation phase (e.g., a field test showed the original structuring principles to be unwieldy, and they were appropriately changed), and (3) to assess the extent to which the guidance programs are implemented as they were originally designed.

Process evaluation data indicate the extent to which program planners and implementers have attained their process objectives. That is, have they actually done what they said they were going to do in preparing program

instructional and counseling procedures, evaluation instruments and procedures, and the like? Have they actually done what they intended in the classrooms and guidance resource centers where the guidance programs were to be implemented? If process objectives are stated clearly and precisely, their attainment may be measured by simply constructing a checklist of "Yes, it was done," or "No, it was not done." Questionnaires, interview schedules, and observational techniques are other possible instruments that can be used to collect process evaluation data.

Product evaluation, which assesses the extent to which student objectives have been achieved, will be considered in the following section.

#### PHASE 4: MAKING DECISIONS BASED ON PROGRAM COSTS AND IMPACT

##### SUMMATIVE EVALUATION

The previous section briefly discussed process evaluation, which is formative in nature. That is, it is information that the implementer uses to shape programs as they go on. The time will also come when the implementer has to make decisions as to whether programs are doing what they are supposed to do and should continue on. He must also decide whether major changes and additional new programs are required. For these types of summative decisions he requires product evaluation information that tells him what, after all is said and done, each program achieved. As well as looking to the impact each program attained in terms of its predetermined goals and objectives, he will want to measure program side effects.

##### COLLECTING PRODUCT EVALUATION DATA

Statements of goals and performance objectives must include standards for acceptable performance to permit an evaluation of these two "products":

1. student achievement of these specified outcomes, and
2. the problem-solving process students used in reaching their goals and objectives.

Ordinarily, it is not difficult to measure the first type of product-- accomplishment of personal goals and objectives--when they relate directly to such visible attainments as completing a course requirement or graduating

from high school. Designating student attainments in behaviorally stated performance objectives allows for relatively easy evaluation: the observer ascertains whether or not the standards of performance specified in each objective (e.g., the student must furnish evidence he accomplished his goal) are now fulfilled.

However, it is more difficult to measure "success" in the problem-solving areas of individual planning, decision making, and self management -- the major skills necessary to set and reach goals wisely. To be appropriate, standards of performance must reflect student competence in employing these personal problem-solving skills not just for hypothetical others presented in case studies, but also for their own problems.

A student's achievement must be assessed by his performance on tasks which are behavioral indicators that he has reached his own goals and objectives. These tasks should also allow him to demonstrate his problem-solving skills as he reaches the desired outcomes. The results of such testing will show when a program has helped students achieve their goals and acquire the desired skills, when it has failed, and when it needs further development to increase its effectiveness.

Norm-referenced measurement (the kind traditionally used) compares the performance of two or more individuals. It contrasts with criterion-referenced assessment which is more appropriate to an individualized student program because it measures whether students have achieved pre-determined standards of performance.

In developing criterion-referenced tests, it is necessary to use items that measure behavior specified in the objective. The measures themselves can take a number of forms. Knowledge outcomes usually are measured by paper-and-pencil and interview techniques. The assessment of attitude outcomes often requires a combination of these techniques with behavioral observation. Skill performance objectives are best measured by behavioral observation in simulated or real-life settings.

#### ASSESSING PROGRAM SIDE EFFECTS

The above measurement focuses on expected outcomes. However, the side effects

of a program are also very important, Information on positive and negative unanticipated outcomes should be sought even though these outcomes may be difficult to measure, especially if they include youth and adult changes in affective responses. Attitude surveys, structured reaction sheets, and case-study techniques can be used to collect this type of data. The latter method, stressing intensive observations of (and interviews with) a few students periodically over a long period, not only highlights short-term side effects of guidance programs but also permits the examination of longer term effects of student attainment of goals and objectives.

### DETERMINING COST-EFFECTIVENESS

Taxpayers, school boards, superintendents and many others are concerned not only with how well programs work, but also at what cost. With these two types of information, they can study the relationships between program costs and impact as well as compute and report cost-effectiveness. Such data are highly desirable for summative decision-making on each program. In order to be able to judge cost-effectiveness, the implementer must collect, analyze, and summarize data related to cost per program, or, more important, cost per participant and cost per goal statement or objective. Such information on costs must then be related to impact data like that outlined under the above two topics, It is best when these impact data identify the youth outcomes that can be attributed to effects of the field test program(s) rather than to other factors.

Cost effectiveness data allow program staff to continue to implement and improve each student program and staff development program while: (a) adapting them to the changing needs and characteristics of the targeted youth and (b) extending the complete guidance, counseling, placement, and follow-up system to priority programs not implemented in initial field tests. Unfortunately the state-of-the-art in determining the cost-effectiveness of educational programs is not advanced. A body of knowledge pertinent to determining cost-effectiveness, and useful in the development of program planners, is less extensive than is desirable.

### DETERMINING COST-EFFICIENCY

Program administrators and recipients sometimes must make decisions that

cannot be answered only by cost-effectiveness information describing how successfully a program achieves its goals. A decision involving which of two or more programs (or strategies in them) most efficiently (cost- and impact-wise) achieves objectives they have in common requires a sophisticated summative evaluation design and procedures. Cost-efficiency analyses entail multiple program (or strategy) comparisons. Cost-effectiveness analyses entail a comparison of the degree to which a single strategy meets its predetermined objectives using specified resources required to produce those outcomes. Obviously, these types of analyses must be conducted before cost-efficiency studies can be implemented.

To produce information on comparative costs and effects so that cost-efficiency ratios can be calculated, program implementers and evaluators must be able to design, conduct, and report quasi-experimental and true-experimental studies. Only by exerting control over program conditions and by randomly selecting students to each approach being compared (or randomly assigning the approaches to the students) will program personnel be able to gather the cause-and-effect data required for cost-efficiency decisions. Schools' conditions usually make it very difficult to conduct such investigations.

### DETERMINING COST-BENEFITS

This final category of summative evaluation decisions focuses on the collection of information not necessarily tied to detailed data on program costs and attainment of measurable objectives. Since they entail more general information, different levels of cost-benefit analyses can precede or follow either the single-strategy or the multiple-strategy analyses outlined above. Cost-benefit decisions depend heavily on abstract values, trends, and projections not always closely tied to empirical data. Such decisions assess the impact of each program in the light of long-range time and social considerations as well as in terms of the continually changing needs of youth, the school system and society. This is the area of summative evaluations of career guidance programs where the state-of-the-art is most primitive.

### USING AND COMMUNICATING SUMMATIVE EVALUATIONS

Summative evaluations such as those outlined above should produce timely, relevant

information that can shape decisions made by program administrators and recipients. Such information will not be used unless it is communicated on schedule and in an understandable manner. Staff require competencies not only to facilitate effective communications by tailoring them to appropriate audiences, but also to encourage decision-making consistent with the data collected. With these ingredients, program administrators should be able to make decisions related to necessary future counseling, guidance, placement, and follow-up programs and changes in field-tested programs. Summative evaluation data should always form the basis for predictions and decisions leading to a viable set of alternatives for meeting future student needs.



IV. Implementing guidance, counseling and placement programs.

Conducting Process Evaluation or program implementation decisions and activities.

Implementing Programs

IV:A State Procedural Objectives and Implementation Strategies

IV:B Select Program Staff and Initiate Staff Development Activities

A wide array of counselor competencies pertain here. For example, staff members should:

IV:B:1

Relate effectively (language, rapport, respect, fairness, support), to students, parents, and teachers.

IV:B:2

Utilize (1) existing instructional packages; (2) tests; (3) various counseling approaches (client centered, existential, Gestalt, psychoanalytic, rational-emotive, transactional analysis); (4) specific strategies (use a problem-solving process to help clients meet their needs; help clients acquire and apply decision-making skills; demonstrate personal and social contracting techniques; engage clients in role playing and behavior rehearsal activities; assist clients in a self-assessment process; help clients acquire and apply behavior observation and analysis procedures; help clients learn and practice self-confrontation; train clients in relaxation and desensitization techniques; employ reward, extinction, and punishment principles with clients while helping them use these tools to shape behavior in their own lives; assist clients to acquire and use self-management and self-control skills); and (5) various modes (individual and group counseling and guidance).

IV:B:3

Analyze key factors of the educational system (learning environment, relationship to the community, resources, requirements, curriculum, scholarships, strengths, weaknesses) and their relationships to guidance, counseling, and placement programs.

IV:B:4

Be sensitive to contemporary problems (drug, racial, sexual) and traditional problems (family, academic, social skills).

V. Making Decisions regarding future guidance, counseling, and placement programs and changes in present programs.

Conducting Product Evaluation of the costs, effectiveness, efficiency, and benefit of these programs.

IV:C Prepare Field Test Sites

IV:D Communicate; Conduct, Report and Apply the Results of Process Evaluations

Making Decisions Based on Program Costs and Impact

V:A Design, conduct, and report product evaluations.

V:A:1

Determine if students have satisfied their career planning and development needs.

V:A:2

Determine if the satisfaction of students' needs can be attributed to the effects of the field test program(s).

V:A:3

Determine any positive or negative unanticipated effects.

V:B Determine the costs of the field test program(s), relate these costs to the effects of such program(s), and summarize and display cost-effectiveness ratios.

V:C Design, conduct, and report studies that identify the most cost-efficient procedures and programs.

V:D Design, conduct and report cost-benefit studies.

V:E Make decisions related to necessary future programs and changes in field-tested programs; and communicate these decisions and their rationale.