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ABSTRACT

This module is a competency-based staff development training package which focuses on the assessment of desired outcomes in career guidance. It is part of a long-range project designed to present a comprehensive approach to career guidance, counseling, placement and followup. As a staff training package, this module is directed toward developing planning competencies by involving staff participants in designing, conducting, and reporting on a desired outcomes assessment. The module goal is for the participant to produce a written statement, derived from empirical data, of desired career planning and development outcomes for youth in the target group of the program being planned. (SJL)

a Systematic Approach to Guidance

Assessing Desired Outcomes

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AN ESEA TITLE III PROJECT

A COMPETENCY-BASED STAFF DEVELOPMENT TRAINING PACKAGE

MESA PUBLIC SCHOOLS »» DR. GEORGE N. SMITH, SUPERINTENDENT

CREDITS

Assessing Desired Outcomes

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Mesa Public Schools in cooperation with
The American Institutes for Research

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FOREWORD

This module was developed as one of eight dissemination packages which were being prepared under an E.S.E.A. Title III project. The Mesa Public Schools worked in concert with the American Institutes for Research (AIR) in this Title III project.

It should be noted that what is being presented here is information on Mesa's on-going long-range project in career guidance, counseling, placement and follow-up; funded not only by Title III but also by Vocational Education Part D Exemplary and District funds. A key element of this project has been the designing, field testing and final production of staff development training packages.

The specific participation of E.S.E.A. Title III comprises an integral part of the total process for orienting counseling services toward specific student outcomes in an accountability model. Title III is housed in the Arizona Department of Education under Carolyn Warner, Superintendent of Public Instruction. The Title III staff was directed by Fred J. Sughrue and the consultants assigned to this project were Jewell Sisemore, the Assistant Director of Title III, and Jesse Udall, Education Program Specialist.

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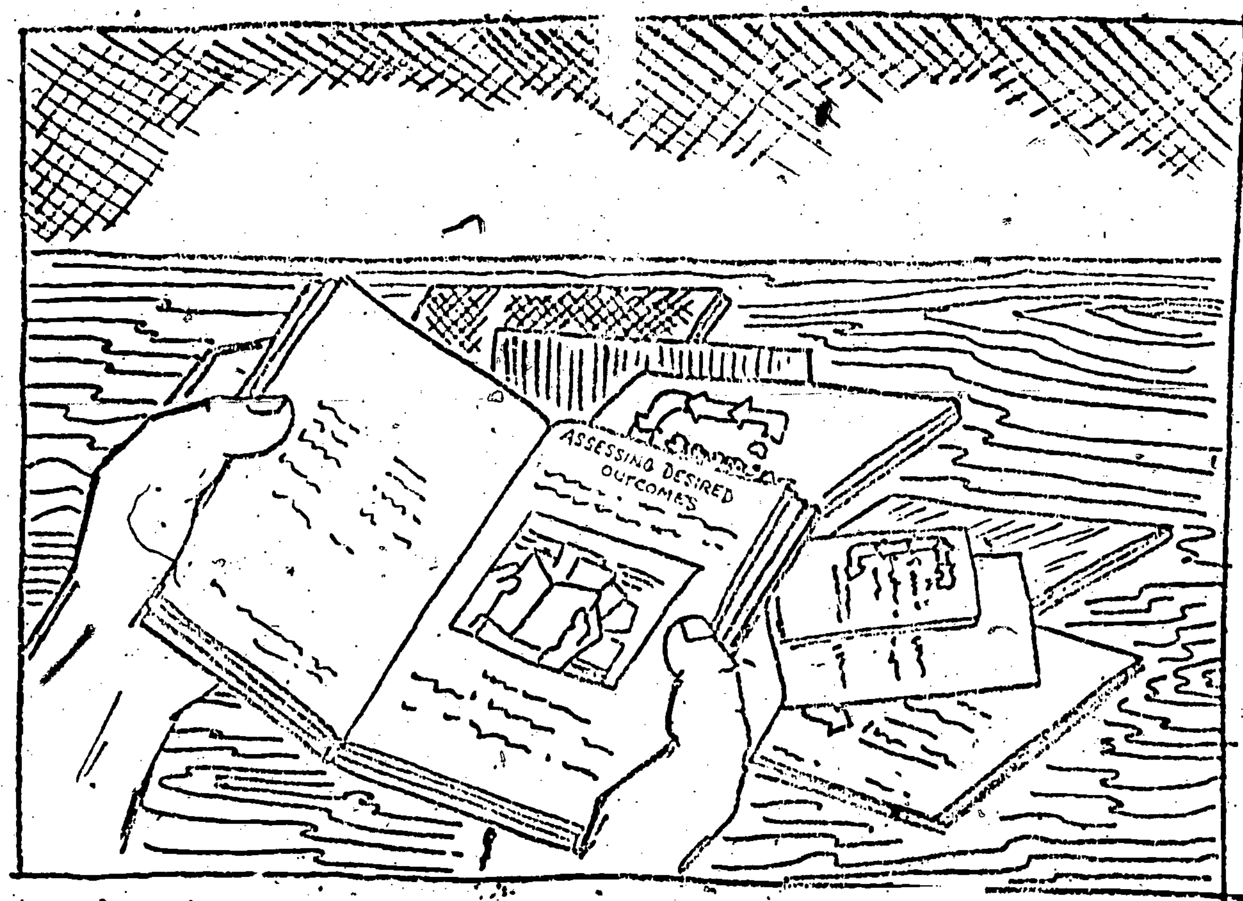


INTRODUCTION

OVERVIEW OF MODULE

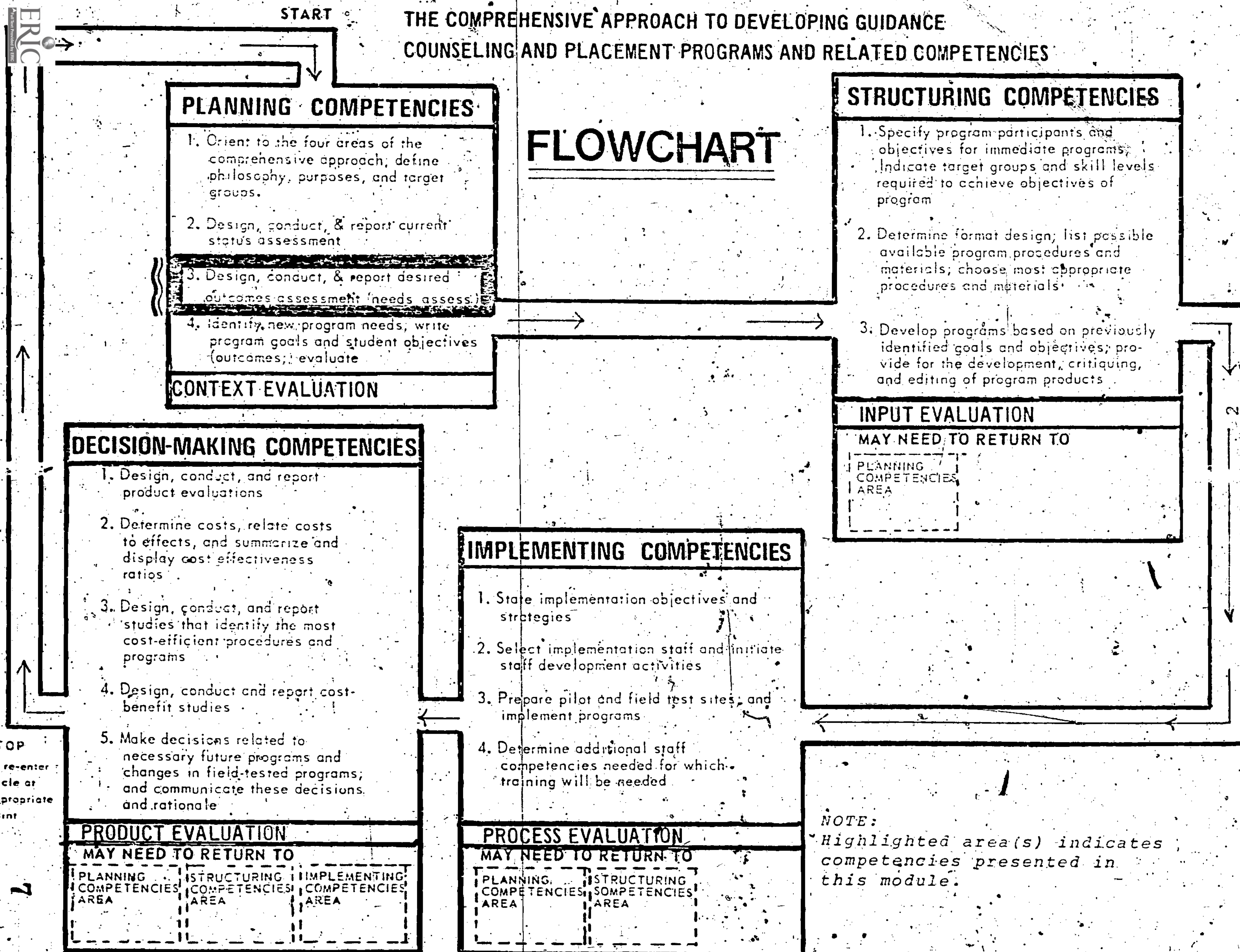
This "module" is part of a package which includes the following:

- Tape-slide presentation
- Flowchart of the comprehensive approach
- Module goals and objectives
- Instructional materials (test of module)
- Progress checks
- Group activities
- Simulation activity
- Application procedures
- Pre- and Post-Assessment
- Further references

Packages are designed so that you may work at your own pace but should not take over 15 hours to complete. The only element of the package external to the module is the tape-slide introduction.

The flowchart page defines the four major phases of comprehensive approach to guidance, counseling, and placement and how they relate to each other. The darkened segment indicates where this package, Assessing Desired Outcomes, fits in the overall plan.

THE COMPREHENSIVE APPROACH TO DEVELOPING GUIDANCE COUNSELING AND PLACEMENT PROGRAMS AND RELATED COMPETENCIES



NOTE:
Highlighted area(s) indicates competencies presented in this module.

The general purpose of this Desired Outcomes Assessment module and the specific outcomes that you should achieve by working through it are summarized below in the module goal and module objectives.

MODULE GOAL

When you have completed the readings and activities of this module, you will be able to produce a written statement, derived from empirical data, of desired career planning and development outcomes for youth in the target group of the program you are planning.

MODULE OBJECTIVES

When you have successfully completed this module you will be able to:

Page		
7	1.	Define in a sentence each, the phrases "current status" assessment, "desired outcomes" assessment, and "needs" assessment, and write a brief paragraph explaining the relationship among the three.
19-22	2.	Write a paragraph defining the purpose and importance of conducting a desired outcomes assessment.
22-27	3.	List and describe in a sentence each of nine of the dimensions on which desired outcomes assessment approaches vary.
29-33	4.	Explain five alternative desired outcomes assessment approaches that have been used in the past, and state at least one major advantage and one major disadvantage of each.
35-36	5.	List the seven steps common to all desired outcome assessments.

37-39 6. Identify the purpose and importance of planning and coordinating the desired outcomes assessment with the advisory group(s), and list the principal activities necessary to accomplish this step.

43-44 7. List three types of important factors that should be considered in identifying the areas on which the desired outcomes assessment will focus.

48-50 8. Define: (a) three important considerations in selecting the sample, (b) two alternative sampling strategies, (c) describe the procedure most appropriate for your situation, and (d) state the rationale for this choice.

57-61 9. List: (a) three important considerations in developing an instrument and procedures for a desired outcomes assessment, (b) the steps in this development, and (c) at least 10 examples of items you have generated for your instrument.

71-79 10. List three important considerations in administering the instrument(s) you have developed.

85-89 11. Identify three appropriate procedures involved in summarizing and analyzing the data you have collected.

91-94 12. Summarize three important considerations in applying the results of your data analysis to a definition of the desired outcomes for your program.

92-94 13. Identify: (a) at least three target audiences of your report which summarize the procedure and products of your desired outcomes assessment, (b) the topics of your report, and (c) how the report content will be tailored for each target audience.

MODULE OUTLINE

Approximate Time	Activity
1 hour	Introduction. You take and score the pre-assessment instrument and view a tape-slide presentation. Next, you examine the flow-chart for understanding of the relationship of this module to the overall comprehensive program and series of packages. Finally, you are presented with the module outline which shows approximate timelines.
30 minutes	Rationale. You are presented with reasons the module was produced and the purposes it hopes to serve. Progress checks and group activities are provided to assist you in attaining the skills and understanding outlined in the module.
7 hours	In-Depth Study. You extend your knowledge through study of the body of the package, group activities, and interested areas from the references section.
30 minutes	Simulation. This activity gives you a chance to practice what you have learned in the reading.
1 hour	Application. In this activity you experience the application of the skills you have gained.
2 hours	Post Assessment. Here is where you demonstrate that you have achieved the objectives of the module.

DEFINITION OF TERMS

Some of the terms used in this module may be new to you, while others may be used in ways that vary from traditional usage. It is important to understand the definitions of terms as they are used in this module.

Assessment--The empirical estimation of a state or condition, applied in this case to the current status and desired outcomes of a guidance, counseling, and placement program.

Card Sort--An assessment tool which provides an individual with a group of statements on some topic and asks him to pick those that relate to him and arrange his choices in the order of their importance.

Critical Incident Technique--Critical incidents are examples of observable behaviors with a clear intent or purpose and at least one observable outcome. The Critical Incident Technique is an assessment procedure which employs these.

Current Status--The objectives, activities, resources, and outcomes of a program as it now exists.

Delphi Method--A questionnaire technique which organizes and shapes opinion through a system of feedback.

Desired Outcomes--The products of a theoretically perfect program which completely satisfies all client needs and wants.

Follow-Up Study--A survey of individuals now removed from a situation or program (in this case, a school and its guidance, counseling, and placement program) which collects their opinions about that situation or program.

Need--This term usually applies to individuals, but programs may be considered to have needs also. In either case, a need is the gap between the current state and the ideal state. The concept may be represented graphically. If point A is where someone is, and point B is where he would like to be, the gap between these two points is the need.

A__________need__________B
Current State   Desired State

In terms of guidance, counseling, and placement programs, "A" represents the program's current status and "B" its desired outcomes. Again, the need is the difference.

Questionnaire--Any of a variety of paper and pencil instruments to which individuals respond to items by checking one of several choices, rating their feelings along a scale, checking yes or no, writing out their response, or by some similar method.

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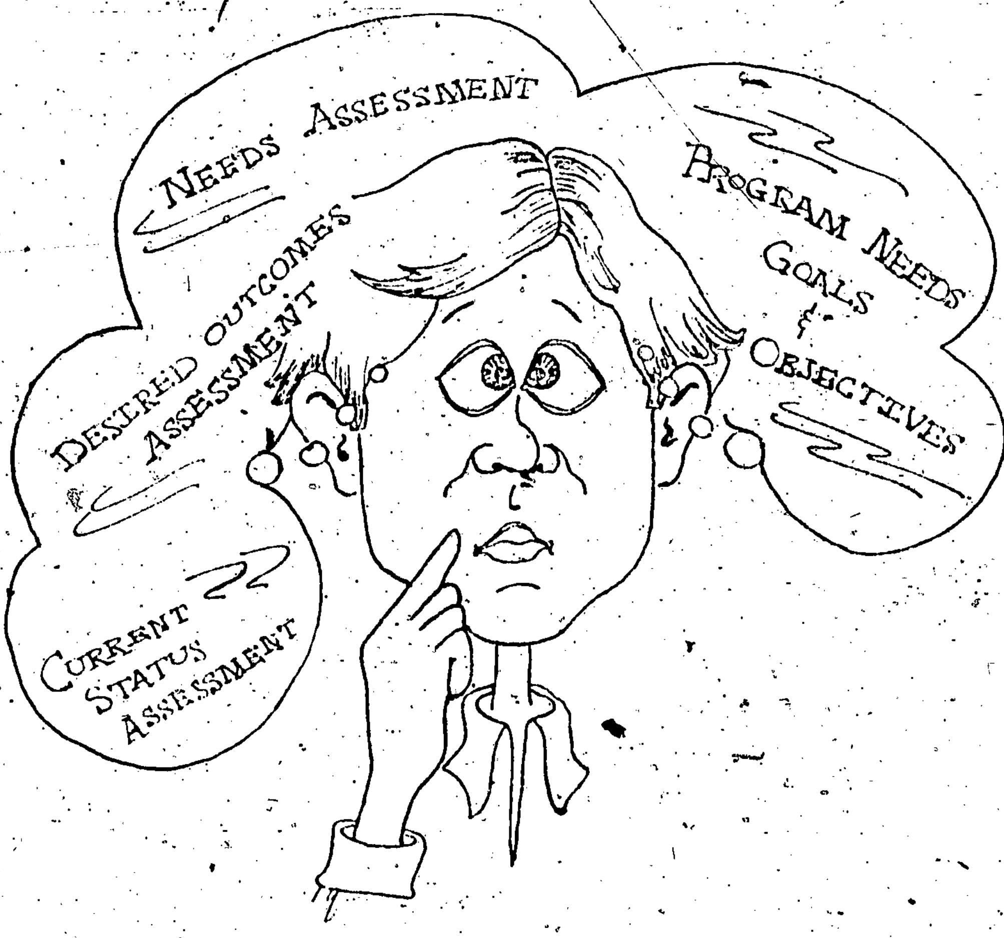
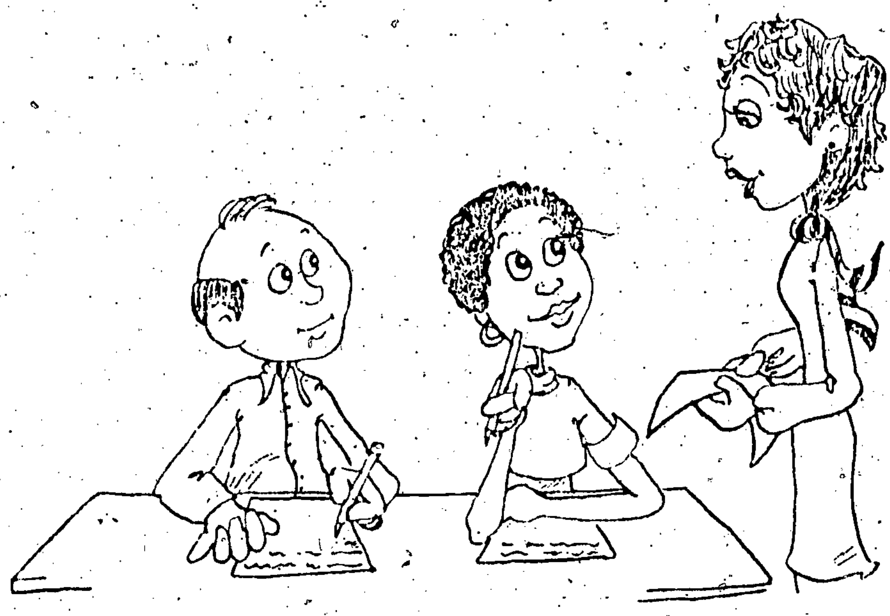
Some confusion may exist among the terms current status assessment, desired outcomes assessment, and needs assessment. Traditionally, the term needs assessment (a first step in planning for program development or improvement) has been used to describe a process which identifies the problems that programs should try to solve. But to provide useful information for program improvement, this process should include two measurements: one of where the program now stands (current status assessment), and one of where it should be ideally (desired outcomes assessment). Thus, three training modules have been written: one to measure the program's current status, one to measure a program's desired outcomes, and one to determine the gap between these two (the <u>program's</u> needs) and to derive goals and objectives for the program from its needs. The planner who is developing an entirely new program will not, of course, conduct a current status assessment. He will determine program needs mainly from desired outcomes assessment data.

The desired outcomes assessment process for a <u>program</u> relies mainly on information about <u>students'</u> needs. Theoretically, students could define their desired outcomes--the goals toward which they aspire, and their current status could be assessed related to each of their desired outcomes. Then a subtraction process could be conducted to determine students' needs. Usually, it is more feasible to ask students to define their needs directly--to indicate the difference between where they would like to be and where they are now. Hence, this module talks of assessing <u>students'</u> needs to determine <u>program</u> desired outcomes. Then by comparing the program's desired outcomes with its current status (which is determined in the program's current status assessment), the program's needs can be identified. These program needs indicate to planners the directions and magnitude of development necessary to achieve an "ideal" program.



PRE-ASSESSMENT



The questions on the following pages are designed to give you an idea of the instructional content of this module so you may determine: 1) whether you wish to continue working on the module; and 2) whether you want to skip certain sections of it. Each question relates to the module objective of the same number. The pages of the text that present the information required to answer the questions are indicated after each question.

Try to answer each question and check your work using the answer key provided. Then, if you feel the module or certain sections of it will be of benefit to you, continue with the tape-slide presentation.

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1. Define each of the following in a sentence: (p. 7)

Current status assessment:

Desired outcomes assessment:

Needs assessment:

Explain the relationship among the three in a brief paragraph:

2. Name three reasons for conducting a desired outcomes assessment. (pp. 19-22)

A.

B.

C.

3. There are approximately nine dimensions on which desired outcomes assessment approaches vary. Name as many as you can. (pp. 22-27)

A.

B.

C.

D.

E.

F.

G.

H.

I.

4. Listed below in the left hand column are five desired outcomes assessment approaches. The column at the right contains advantages of each approach. Match each approach with the advantages the provide the best description of the approach. (pp. 29-33)

Approaches	Advantages
________ Card Sort	a. Uses valuable observational techniques, goes into depth, involves participants.
________ Questionnaire	b. Gives benefit of hindsight, instruments easy to develop because they are unusually brief, administration fairly easy.
________ Follow-up Study	c. Most widely available and easy to administer, permits a large sample.
________ Critical Incident Technique	d. Prompts deep exploration, elicits fine distinctions, provides good insights, aids in ranking priorities.
________ Delphi Technique	e. Flexible, fairly personal, provides structure while allowing for individual responses, gives a ranking of needs.

5. List the seven steps common to all desired outcomes assessments. (pp. 35-36)

A.

B.

C.

D.

E.

F.

G.

6. List five activities necessary in planning and coordinating a desired outcomes assessment with advisory groups. (pp. 37-39)

A.

B.

C.

D.

E.

7. Mark the statement(s) below which should be considered in identifying the areas on which the desired outcomes assessment will focus. (pp. 43 & 44)

_____ A. Defining its purpose.

_____ B. Considering various procedures and their usefulness related to the defined purposes.

_____ C. Establishing decision processes and rules, and documenting these.

_____ D. All of the above.

_____ E. None of the above.

8. Define: (pp. 48-50)

A. Three important considerations in selecting the sample:

1.

2.

3.

B. Two alternative sampling strategies:

1.

2.

C. The procedure most appropriate to your situation:

D. The rationale for this choice:

9. List: (pp. 57-61)

A. Three important considerations in developing the instruments and procedures for a desired outcomes assessment:

1.

2.

3.

B. The steps you will go through in this development:

1.

2.

3.

10. List: (pp. 71-79)

A. Three important considerations in administering a desired outcomes assessment instrument.

1.

2.

3.

B. The steps you will go through in this administration:

11. Identify three appropriate procedures involved in summarizing and analyzing collected data from a desired outcomes assessment instrument. (pp. 85-89)

A.

B.

C.

12. Summarize three important considerations in applying the results of a data analysis to a definition of the desired outcomes for your program: (pp. 91-94)

A.

B.

C.

13. Name: (pp. 92-94)

A. Three target audiences that one might have for a report summarizing procedures and products of a desired outcomes assessment.

1.

2.

3.

B. Possible topics of your reports.

1.

2.

3.

4.

C. Ways in which the report will be tailored to each of the audiences listed in part A of this question.

1.

2.

3.

PRE-ASSESSMENT

ANSWER KEY

1. Current status assessment: The empirical determination of the objectives, activities, resource allocations, and outcomes of a program as it now exists.
   Desired outcomes assessment: The empirical determination of the gap between current status and ideal status for either an individual or a program.
   Needs assessment: The empirical determination of the gap between current status and ideal status for either an individual or a program.

   Current status measures where things are at present, desired outcomes measure where they would be ideally, and needs represent the gap between these two.

2. Any order and/or similar content:
   A. They supply the means for accountability.
   B. They identify youth needs rather than
   C. They give concrete empirical data for program structure.
   D. They provide comprehensive data instead of isolated guesses.
   E. They increase program coordination.
   F. They initiate a process of planning and evaluation designed to keep programs abreast of the present.

3. A. Direction and Content of Focus--This refers to the nature of the content of the approach, whether it has a problem or solution focus, or some other focus.
   B. Breadth of Focus--This refers to how broad ranging and comprehensive the assessment will be, whether it will delve deeply into one or two areas, or more lightly into many.
   C. Depth of Coverage--This refers to the overall length of the assessment, how deeply it probes into the areas it does focus on.
   D. Degree of Structure--Assessments can ask for highly structured responses, such as checks or rankings, or for open ended responses, which allow the respondent to phrase his own response.
   E. Personalization--Some assessments are administered to thousands impersonally, others to a few through personal interviews. The degree of personal attention received by the respondent is the referent.
   F. Sampling Considerations--This refers to who will be included as respondents in the administration of the assessment.
   G. Quality--Four factors are particularly important in determining the quality of an assessment. They are validity, reliability, generalizability, and replicability.

H. Availability and Costs--This refers to whether instruments and procedures are commercially available or must be individually developed, and in either case the expense involved.

I. Ease of Administration--Appropriateness of the instrument, ease of data processing, time of administration, amount and nature of training, scheduling flexibility, and practical usability all pertain here.

4. e Card Sort

c Questionnaire

b Follow-up Study

a Critical Incident Technique

d Delphi Technique

5. A. Planning and coordinating with the advisory group(s).
B. Identifying the areas on which the assessment will focus.
C. Defining and selecting the sample.
E. Administering the instruments.
F. Summarizing and analyzing the data.
G. Applying the results to a definition of the desired outcomes.

6. A. Communicating the purposes and procedures of the assessment to those to be involved and affected.
B. Choosing the best procedure for the assessment.
C. Planning subsequent steps and finding personnel to fill the necessary roles.
D. Coordinating this phase with the current status assessment.
E. Assuring meaningful data.
EXTRA--Making necessary considerations for computer use.

7. D.

8. A. 1. Assuring a representative sample.
2. Minimizing sampling error by including adequate numbers.
3. Selection of subgroups to be included.
Also: Assuring adequate response level and validity.
B. 1. Simple random sampling.
2. Stratified random sampling.
C. Correct response is specific to your situation.
D. Correct response is specific to your choice. Be sure you have justified your choices related to items 8A and 8B above.

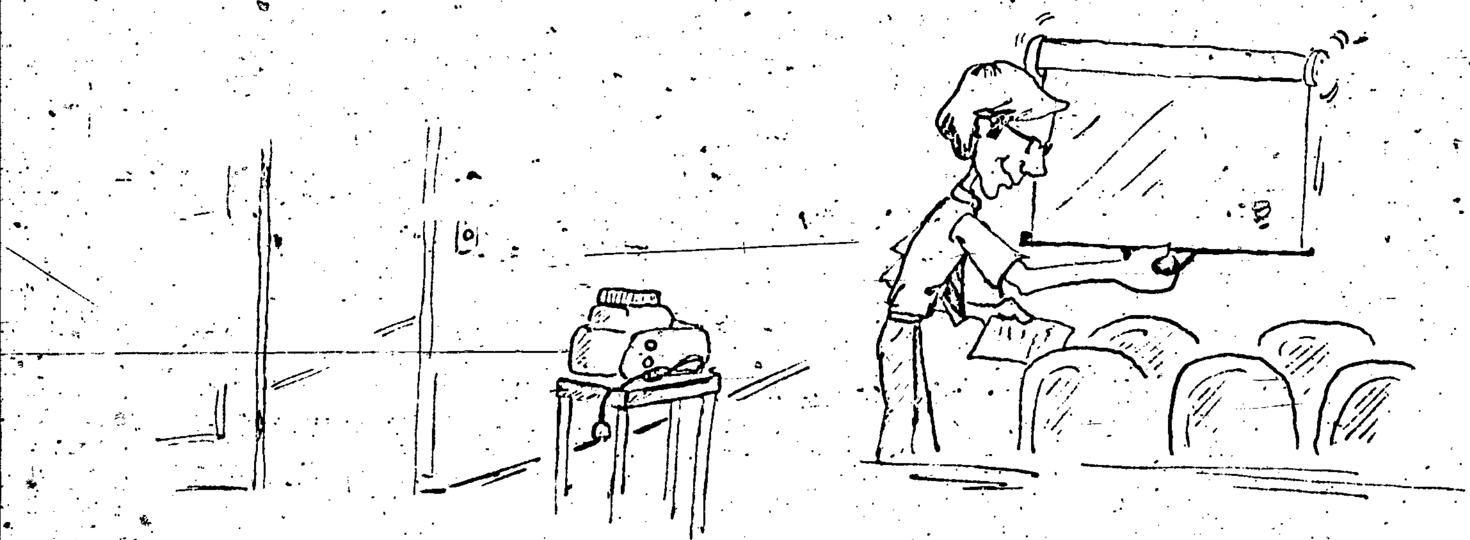
9. A. 1. Write high quality items (using a number of criteria).
2. Write clear and useful directions.
3. Plan adequately for computer use.
B. 1. Select and train interviewers.
2. Orient respondents.
3. Develop detailed schedules for all aspects of administration.

10. A. 1. Choosing appropriate places and times for administration.
2. Communicating necessary information to all involved.
3. Building in flexibility to allow for problems.
B. 1. Select and train interviewers.
2. Orient respondents.
3. Develop detailed schedules for all aspects of administration.
4. Provide necessary information to all involved parties.
5. Establish an operations headquarters.
6. Collect the data.

11. A. Keypunching computer cards, conducting the computer run, and interpreting printout sheets.
B. Gathering, grouping, and integrating added statements and open-ended responses.
C. Developing statistical and subgroup weighting procedures.

12. A. Noting items and areas that rank high and low in the data summary.
B. Applying the data intelligently to your situation.
C. Producing a document which summarizes the outcomes of the assessment and the process used for it.

13. A. 1. Students and the general populace.
2. Teachers and administrators.
3. Counselors and the advisory group.
B. 1. Background and Purposes of the Planning Activities
2. Planning Activities at All Schools (Design, Sampling, Instruments, Data Collection Procedures, Data Analysis)
3. Results, Conclusions, and Implications for Each School
4. District-wide Summary, Conclusions, and Recommendation
C. 1. Students and the general populace--Keep it short and concise, avoid technical language.
2. Teachers and administrators--Include more detail.
3. Counselors and the advisory group--Include all the information necessary and relevant, and any required technical language.



AUDIO VISUAL INTRODUCTION

This module, "Assessing Desired Outcomes," includes an audio cassette and slides to introduce you to this phase of the staff development series. We suggest that you and any other individuals who are considering working on this package first take a few minutes to view and hear this presentation. The tape is playable on any cassette recorder. The slides are also standard and numbered in the order of appearance. An audio cue ("beep") indicates the points at which you are to advance to the next slide. Begin with the title slide in the projector gate.

In the event the tape-slide is not available, you may read through the tape-slide script which is located in Appendix B. This will give you a quick overview of the contents of the module.

OVERVIEW
DESIRED OUTCOMES ASSESSMENTS

RATIONALE

A fundamental question should be addressed at the beginning of this module. Why conduct desired outcomes assessments at all? Your guidance and counseling program may be meeting all the needs of youth already, or a substantial proportion of them. It may be grounded in the best theory available concerning effective programs. And conducting the assessment will require a substantial amount of time, money, and energy, if it is to be done well. Why go to all the bother?

why assess?

The answer to this question varies from instance to instance, but certain responses seem to apply fairly generally. One reason relates to the growing demand for accountability in all aspects of education, and particularly in areas outside the traditional academic subjects. Educators and counselors are being told by those who pay their salaries that they had better start being able to justify their use of the taxpayers' money. And this justification must be in concrete, measurable terms, not vague statements. So part of the answer is that practical demands from the society are forcing all programs in education to become accountable.

accountability desired

This explanation favors the trend toward accountability with negative connotations, when in fact the reasons for it are not negative. Don't counselors owe it to themselves and their clients to know in precise and comprehensive terms what those clients need and want? In the past, programs have often been structured around theories developed by scholars who work in settings that are removed from the places where theories are implemented. These theories are taught to succeeding generations of counselors who have continued to use them in an ever-changing world. To be able to claim they are addressing the important problems of the present, counselors need current information about what clients need and want, based on those clients' own statements. Desired outcomes assessments supply such information. They allow programs to have the most up-to-date information possible, information that comes from students themselves, not theories. These programs can be structured in a way that is open to real accountability.

empirical data gathered

Other reasons also contribute to the case for assessing desired outcomes. Programs are often structured around system needs. Desired outcomes assessments reinforce the importance of youth needs. They encourage the adaptation of the program to people, rather than vice versa. They can also supply very comprehensive data on these youth needs, touching on far more variables than earlier guesswork or hunches. And they usually work to insure coordination of programs. If there are four counselors in a school there

youth needs stressed

will probably be four theories on which problems should be addressed first. With a data base established through a desired outcomes assessment, empirical evidence exists concerning the needs and wants of youth. The four counselors can reach a consensus on priority problems and work together to fulfill identified needs and wants.

Still another benefit can come from conducting a desired outcomes assessment. Often programs have existed for extended periods of time without ever undergoing any fundamental planning. They may have been started decades ago, and have simply gone on through inertia and tradition. A desired outcomes assessment begins a whole process of planning and evaluating that can be invaluable. It will help a program to set goals for itself and then gauge its effectiveness in terms of progress toward those goals. And rather than ending the planning and evaluation, desired outcomes assessment should help to build these processes into the very structure of the program. A desired outcomes assessment is not final. It encourages further assessment, and helps to establish a climate of flexibility and alertness for change. In this way the needed structure for change can be built into programs. Hopefully, they will be less likely to become outdated by society's breakneck pace of change.

evaluation possible

To summarize, then, there are numerous reasons for conducting desired outcomes assessments. They supply the means for accountability in guidance and counseling programs; give concrete, empirical data around which to structure programs; respond to youth needs rather than system needs; provide comprehensive data instead of isolated guesses; increase program coordination; and initiate a process of planning and evaluation designed to keep programs current. Of course they achieve these purposes in direct relation to how well they are done. The rest of this module will be addressed to the "how" of desired outcomes assessments.

DIMENSIONS ON WHICH APPROACHES VARY

The phrase "desired outcomes assessment" is a generic one. It does not define a particular method or technique, merely the general process of assessing the goals youth want to achieve through a program. When one begins to delve into particular techniques available for this process, he soon realizes the subject is complex. There are numerous dimensions on which approaches vary, and many different techniques that have actually been tried. A useful task for the program planner who must design a desired outcomes assessment is to understand the more important of these dimensions, and the principal techniques that have actually been commonly used. For this purpose, the module will briefly discuss nine dimensions on which desired outcomes approaches vary, and then describe five examples of the more commonly used techniques.

A. Direction and Content of Focus

first dimension

Depending on the purpose of the assessment, it may focus on various content areas. Basically the variable here is, what is the content of the assessment? Is it looking for information on family situations or on school situations? Is it seeking information on interpersonal needs, or on academic needs? Another particularly important dimension is whether the assessment has a problem orientation or a solution orientation. The Mooney Problem Checklist*, for example, asks respondents to indicate from a series of lists the problems which are applicable to them. Then it tries to identify weaknesses and faults. Contrastingly, the Priority Counseling Survey* generally asks respondents to indicate those things they like or are good at, thereby defining positives instead of negatives. One might say it has a solution focus, as opposed to a problem focus. Each focus of course has advantages, and both ultimately help to define a program's direction. The better choice depends on the purpose of the assessment. In any case, direction and content of focus are important dimensions on which desired outcomes assessments vary.

B. Breadth of Focus

second dimension

This refers to how comprehensive and broad ranging the assessment is to be, and relates to how many content areas it covers. Do you want to probe into one or two isolated areas, or cover every aspect of the respondents' lives? It is possible to design assessments that have a single focus, that focus on several areas, or that are very comprehensive

*See REFERENCES section.

in their focus. The narrower the focus, the more that can be learned about any one area. The broader the focus, the better the overall picture, but the weaker the understanding of any one area. Again, the choice depends on the purpose of the assessment.

C. Depth of Coverage

third dimension

This is related to the last dimension, but refers in particular to the overall length of the assessment. Is it to be a ten minute checklist, or a three hour interview? Will you probe deeply into the area you decide to focus on, or ease your data analysis task by using a few key items in a given area? Do you have the resources of time and money to undertake an extremely thorough assessment? Will you be content if the information gathered fails to go into depth and provide fundamental direction? These are questions that must be answered in deciding on your depth of coverage.

D. Degree of Structure

fourth dimension

The question here is whether you will determine the nature of the responses by asking the respondent to check, circle, or rank, or whether you will ask him to structure his own response on a more open-ended questionnaire or in an interview. The former choice makes the task of analyzing the data considerably easier, and some structuring will probably always be necessary to allow meaningful summary and analysis. On the other hand, more open-ended questions allow more individual expression and fuller gradations of feeling. They may also produce insights and suggested solutions that structured formats fail to elicit. The benefits and weaknesses of each degree of structure must be weighed and a choice made to conform with the conditions pertaining in a given instance.

E. Personalization

fifth dimension

Assessments can range all the way from the individual interview, in which the respondent talks to an interviewer and has his thoughts and responses recorded on a tape or written down, to the mass inventory in which thousands of individuals indicate their feeling by marking a paper. In between is a whole spectrum of approaches which lie somewhere along the line defined by these two extremes. Degree of personalization is thus another dimension on which approaches vary, and another variable for the planner to consider in choosing his assessment procedure.

F. Sampling Considerations

sixth dimension

Entire books have been written on this subject alone. Do you want information from elementary school students, or graduates now out working? From subgroups within the student population (minorities, residents of a geographical area)? From adults, and various adult subpopulations (parents, teachers, counselors, administrators, community representatives)? Will you sample all groups to be affected by the assessment, or only those most directly affected? Will you include all students? A percentage of all students? Students at selected grade levels? Or a percentage of students at each selected grade level? Will you include all schools within the district, or pick one or two as representative? How will you assure a representative sample if you can't include everyone? The questions in this realm are endless, and the answers are critical for reliable results. The training section of this module goes into the sampling question in some detail, offering suggestions and guidelines. It is a central dimension to consider in conducting a desired outcomes assessment.

G. Quality

seventh dimension

Whole books have been written on this subject alone. Quality of the assessment instruments and procedure itself is a subject so broad that dozens of variables contribute. Four key ones, however, must be considered under any circumstances. These are validity, reliability, generalizability, and replicability. Validity refers to whether an instrument actually measures what it is designed to. Reliability refers to whether an instrument produces consistent results over repeated usage. Generalizability refers to whether the results obtained with a limited sample are accurate for the broader group they are intended to represent. Replicability refers to whether the entire process can be documented and repeated elsewhere. If the desired outcomes assessment is to be a useful one, it should meet high standards on these criteria.

H. Availability and Costs

eighth dimension

An obvious practical consideration relates to how available a particular technique is; that is, whether instruments and procedures are already in existence, whether they may be purchased commercially, or whether they must be written and developed. And of those techniques available, what are their relative costs? Could a technique be applied more cheaply by developing one's own materials and procedures? The practical necessity of deciding on a technique that your district or school can afford is one that must be considered.

I. Ease of Administration

ninth dimension

Another practical dimension on which desired outcomes assessment techniques vary is that of ease of administration. This includes several factors: ease in processing data from the instrument to produce usable summaries; time of administration; amount and nature of training necessary for administration; scheduling flexibility of administration to adjust to school schedules and available space; and appropriateness of the instrument for the level of respondents participating in the assessment. Appropriateness of the instrument and procedures to the purpose of the assessment is another factor which contributes to ease of administration. Practical considerations can't be ignored, and ease of administration is a central one.

PROGRESS CHECK

Write a phrase which gives the defining characteristics of each of the following deminsions on which desired outcomes assessment approaches vary.

Direction and content of focus: ______________________
(p. 22)

____

____

Breadth of Focus: ____________________
(p. 23)

____

____

Depth of Coverage: ____________________
(p. 24)

____

____

Degree of Structure: ____________________
(p. 24)

____

____

Personalization: ____________________
(p. 25)

____

____

Sampling Considerations: ____________________
(p. 25)

____

____

Quality: ____________________
(p. 26)

____

____

Availability and Costs: ____________________
(p. 26)

____

____

Ease of Administration: ____________________
(p. 27)

____

____

If you are unsure of the definition of any of these dimensions, check back over the preceding pages.

PRACTICAL EXAMPLES

All of the nine dimensions have been discussed on a fairly theoretical, abstract level. What are the techniques actually in common use today? How do they combine the dimensions into a workable format? The following sketches of five actual techniques give brief descriptions of common realistic alternatives for conducting desired outcomes assessments.

five techniques

The Card Sort

first technique

In this technique an individual is given a "deck" of cards, each with a statement relating to a need he might have. For example, one card might say, "I need to improve my understanding of what I read." A deck of cards includes statements related to a common area. Individuals sort through each deck they receive, eliminate those cards which do not represent needs for them, and arrange those that do in order from most important to least. The cards selected from several decks may then be combined and arranged by the individual according to their importance. When data on the needs of any individuals are combined, the areas of highest need, and the highest needs within each area are established. From high and low ranking needs, program objectives may be drafted to give direction to program developments.

The card sort boasts a number of strong features. It is fairly personal, allows for flexibility in breadth of focus and depth of coverage, and provides structure while allowing for individual responses (through individuals adding their own cards). It is less well known than the question-naire, but not difficult to develop. Administration is also more complex than that for most questionnaires, but not necessarily prohibitively so.

The Questionnaire

second technique

What is meant by this term is a paper and pencil instrument to which the individual responds in any of a variety of ways. These include written responses to open-ended questions, checking yes or no, checking one of several multiple choice responses, ranking a series of statements from highest to lowest, and rating statements along a numerical or written scale. Some examples of commercially available instruments questionnaires are the Educational Needs Assessment* (a rating format), The Mooney Problem Checklist* (multiple choice checklist, followed by a ranking procedure), and the Priority Counseling Survey* (multiple choice format). Questionnaires are often for a particular assessment, especially if open-ended responses are desired.

Questionnaires represent the most common form of assessment, because of their ease of administration and availability. They can also be flexible in terms of breadth of focus, and often permit a large sample because of their ease in administration. They usually provide less depth of coverage and involve participants less fully in the assessment process than the card sort, and also lack the latter's personalization.

*See REFERENCES section.

The Follow-Up Study

third technique

This is another common form of assessment, characterized most distinctly by the sample of respondents. It is a survey of individuals now removed from a program, such as graduates from high school who are asked for their thoughts on the high school guidance and counseling program. A fairly short, structured or open-ended questionnaire is frequently employed in follow-up studies, although an interview format is sometimes used. Mailing strategies often play an important role in this kind of survey, and achieving a high level of response is most important.

The follow-up survey is probably the most limited technique in common use. It fails to sample present or future clients of a program, but does boast the advantage of questioning respondents who have the benefit of hindsight. Depth of coverage is not often achieved when mailing strategies are used, since a lengthy instrument is generally associated with low response rates. Follow-up studies usually employ individually tailored instruments, since these can be designed to pertain directly to the situation being "followed-up."

The Critical Incident Technique

fourth technique

Critical incidents are examples of observable behavior with a clear intent or purpose and at least one observable outcome. They were used at least once, in a project in Bucks County, Pennsylvania, as part of a desired outcomes assessment. Ten global goals for the educational system had been identified, but they required further definition because they were very abstract. Thousands of critical incidents relating to the goals were collected from parents, ~~teachers,~~ and students, allowing precise behavioral definitions of the goals both in terms of student behaviors and teacher strategies to encourage such behaviors. A Classification scheme was then built for each goal, and a series of "needs-assessment" questionnaires were developed. The questionnaires were used to determine the extent to which appropriate student behaviors were being demonstrated. The critical incident technique served to define the desired outcomes of the educational system. Once this was done, the current status of students, and thus of the educational system, relative to these desired outcomes could be assessed. This process could be used with guidance and counseling programs as well.

This is an unusual form of assessment, but the observational techniques involved are a valuable tool. The process certainly goes into depth, and requires training in observation, extensive collection of incidents, and skill in analysis. It involves participants in the assessment process, providing personalization, and can be flexible in its focus. It may be challenged because it relies on predefined goals, rather than seeking the perceptions of students and others. This challenge is not serious, however. Any structured instrument must rely upon predefined goals to some degree. As long as the goals are sufficiently global, no participant will be constrained in his responses.

The Delphi Technique

fifth technique

This is a means of simplifying the task of identifying and ranking needs and priorities, and arriving at goal definition. It refers to a series of intensive interrogations of samples of individuals (most frequently, experts) by means of mailed questionnaires. The mailings are interspersed with controlled feedback to the participants. Responses to each mailing are summarized and returned to respondents anonymously. Competing opinions usually converge and diverse opinions are often blended into distinct and clearly stated majority and minority opinions. Personality conflicts are usually avoided.

Weaknesses of the Delphi technique include the fact that it usually samples only selected experts, that it requires much tabulation, record keeping, and mailing, and that it provides consensus, but not necessarily the "best" judgment. On the other hand, it often prompts deep exploration and elicits fine perceptions and distinctions, generates lively interest and real insight, and aids in identifying and ranking needs and priorities.

PROGRESS CHECK

In a sentence each, give the defining characteristics of the following examples of assessment techniques. Then list an advantage and disadvantage for each.

1. The Card Sort: ____________________
(p. 29)
____
____

Advantage: ____________________

Disadvantage: ____________________

2. The Questionnaire: (p. 30) ___

___

___

Advantage: ___

Disadvantage: ___

3. The Follow-Up Study: (p. 31) ___

___

___

Advantage: ___

Disadvantage: ___

4. The Critical Incident Technique: (p. 31) ___

___

___

Advantage: ___

Disadvantage: ___

5. The Delphi Technique: (p. 33) ___

___

___

Advantage: ___

Disadvantage: ___

If you are unsure of any of your answers, check the descriptions of the techniques found on the preceding pages.

TRAINING

INTRODUCTION

It would be desirable to include extensive training in all of the techniques discussed in the previous section, but such a course is not practical. While each technique boasts advantages, and each has disadvantages, a number of factors suggest the card sort as the ideal method. Because of its flexibility, it can be adapted to almost any situation or need. It produces a rank ordering of needs around which to structure programs, and this is a most useful form of information. The card sort technique allows for real comprehensiveness. It uses a computer to aid in summarizing the data collected. It is a well documented and tested process, while also progressive and innovative as compared with questionnaires and follow-up studies. Technical assistance is available for those who need help in its use. For these reasons, this module will concentrate on the card sort method of conducting desired outcomes assessments.

card sort most desirable

The assessment process may be broken down into a number of steps, which pertain whatever the particular method chosen. They are as follows:

assessment steps

1. Plan and coordinate with the advisory group(s).
2. Identify the areas on which the assessment will focus.
3. Define and select the sample.
4. Develop the instruments.

5. Administer the instruments.

6. Summarize and analyze the data.

7. Apply the results to a definition of the desired outcomes.

The section of the module which follows will detail these steps for the card sort procedure, presenting considerations, guidelines, and suggestions for each. In steps four and five, the questionnaire and follow-up study techniques will also be touched on briefly. The other sections, in large part, apply to all methods equally well. The steps will be discussed in terms of the card sort, but individual administrators may generalize them to another process if they wish. A Procedural Checklist for each level may be found in Appendix C.

PROGRESS CHECK

List the seven steps of the assessment process which apply to all techniques. (p. 35)

1. ______________________________
2. ______________________________
3. ______________________________
4. ______________________________
5. ______________________________
6. ______________________________
7. ______________________________

If you are unsure of any of these, check the list on the preceding page.

PLANNING AND COORDINATING WITH ADVISORY GROUPS

step one

The first task in conducting a desired outcomes assessment is establishing the need for such an assessment in the minds of those who have the power to approve it and put the results of the assessment to use. Enthusiastic cooperation and support from such a body can make a huge difference in the success of the assessment effort. Making the case for the assessment should not be difficult if information is gathered to illustrate the lack of direction programs are apt to have without concrete data on what students need from a guidance, counseling, and placement program. Every student stands to benefit from participating in a program which has been structured to meet his needs and the needs of others like him, rather than a program based on vague goals that administrators or counselors have established in the past. But those with the power to improve guidance, counseling, and placement programs must be given a chance to understand this point. Thus, the first big job in conducting an effective desired outcomes assessment is one of communication.

communication important

Closely related to the communication task is the need to insure the participation of all other groups to be affected by the assessment in establishing the goals and process of the effort. Counselors, teachers, administrators, students, parents, and community representatives will support a worthwhile project if they understand its purpose and the benefits that will result from it. But if counselors, for example, are forced to participate in a process they see as threatening to their jobs and the way they have been doing them, without being given an understanding of the purposes of the assessment and the kind of positive change for themselves as well as students that is likely to come from

group participation needed

it, they will be unwilling partners in the effort. If they lack enthusiasm, no doubt teachers will also. Teachers tend to convey attitudes to students, students to parents, and soon a failure to convey the purpose, importance, and procedures of a worthwhile effort to one key group may sabotage the whole operation. This point cannot be stressed too strongly: all parties to a successful assessment of the desired outcomes of a guidance, counseling, and placement program must be brought on board and kept enthusiastically involved throughout. Communication is a key.

One of the best ways to assure full understanding and communication is to document the purposes of your effort and the means you plan to use in achieving those purposes, and then to distribute a brochure or pamphlet containing this information. On the next page is such a brochure. It outlines the essentials of the assessment project, and puts the effort clearly in focus.

choice of instrument and procedures

Certain other considerations require attention at this initial phase of an assessment. One is to choose the type of instruments and procedures that will be used. The variables and examples described and discussed in the first segment of this package should prove useful to the advisory group at this point. The group should answer questions such as: which approach fits best with local restraints and needs? What are the conceptual variables most important, and the pragmatic factors most significant? Success or failure may hinge on the care with which choices at this stage are made.

CHERRY CREEK HIGH SCHOOL
COUNSELOR ACCOUNTABILITY PROJECT

BACKGROUND

--ACCOUNTABILITY IN EDUCATION has been mandated by law in Colorado.

ACCOUNTABILITY MEANS:
- Determining outcomes desired from conduct of a program within the constraints of available resources.

PLANNING. Stating broad goals and specific objectives of the program.
- Developing strategies for achieving the desired outcomes.

IMPLEMENTING. Implementing the strategies and conducting the program.

EVALUATING. Evaluating the extent to which desired outcomes were achieved and goals and objectives attained.

RECYCLING. Repeating the cycle and altering any aspects to better achieve the desired outcomes.

In short, accountability means stating what you plan to accomplish, planning how to do it, and evaluating how effectively you have done it.

THE CHERRY CREEK HIGH SCHOOL COUNSELORS
In 72-73 certified to Dr. Gee their continuing frustration over difficulty in determining the most urgent counseling and guidance needs of Cherry Creek students, and in ascertaining how effectively and efficiently the present counseling program is meeting student needs.

Informal discussion brought out that counselors were seeking a systematic method for making the counseling service more responsive to the needs of our students and to the aspirations for them of their parents and teachers.

It was decided that developing and implementing A COUNSELING ACCOUNTABILITY MODEL might help resolve the dilemma.

A proposal for devising, conducting, and evaluating a counselor accountability project was written by a committee of counselors and teachers in 72-73 and was federally funded by Title III ESEA.

PROJECT GOALS

GOALS FOR THE 73-74 ASSESSMENT YEAR:

1. To assess all objectives and activities which make up the current counseling and guidance programs at Cherry Creek High School.
2. To develop a statement of high ranking and low ranking needs of students related to their educational and learning needs, pre and post graduate planning needs, and to their emotional and social growth.
3. To determine the relationship between the current counseling program and high ranking student needs.
4. To devise strategies and procedures designed to meet high ranking student needs not being met by the current program, within limits imposed by available resources.
5. To develop a process for the on-going evaluation of high priority current programs or the redesigning of other counseling programs and for evaluating 73-74 activities.
6. To keep students, parents, faculty and administration informed of the progress of the planning activities and to seek their advice and help in forwarding these activities.
7. To write a proposal for funding for 74-75.

GOALS FOR THE 74-75 OPERATIONAL YEAR:

1. To implement the programs developed in 73-74 on a pilot basis.
2. To assess and evaluate outcomes of these pilot programs.
3. To redesign, maintain or eliminate pilot programs as indicated by evaluation of their effectiveness.
4. To expand effective programs within limits of constraints imposed by available personnel, time, money, etc.
5. To devise strategies for meeting newly identified high priority student needs.
6. To seek alternate sources of funding.

PROJECT PROCESS

The work of the 73-74 planning year will be conducted by a committee of teachers and counselors under direction of Mr. Albert Thompson with advice from out-of-district consultants and an in-district advisory board. The committee has been divided into four task forces with discrete functions.

TASK FORCES

1. COMMUNICATIONS-To develop and execute strategies for keeping all persons and groups involved in or interested in the project informed as to the focus and progress of the project, as well as to obtain and disseminate feedback and reactions from these persons and groups.
2. NEEDS ASSESSMENT-To develop and administer the instruments for obtaining information from students, parents, and school staff concerning their perceptions of student needs. To analyze the data and report needs ranked from highest to lowest priority.
3. CURRENT STATUS ASSESSMENT-To develop and administer the instruments for assessing the current counseling program. To analyze the data and report which of the identified needs are being met by the present program. To prepare a report of these findings.
4. PROGRAM DEVELOPMENT-To integrate the findings of task forces two and three. To review the literature concerning out-of-district counseling services. To determine which of the high ranking needs can best be met by the counseling service. To devise strategies and programs for meeting these needs efficiently and effectively. To prepare a report of these findings.

All four task forces, the directors the consultants, and the advisory board will work cooperatively to develop a counseling service that will best meet the most urgent needs of the students of Cherry Creek High School.

ADVISORY COMMITTEE-To monitor and evaluate the progress of the project. To obtain the approval and support of the group they represent of the project's goals and objectives. To review any necessary changes in project activities.

Following these decisions are those related to planning for the subsequent steps in the assessment process. Choices as to who will carry out each such step are key in assuring the success of an assessment. Who is best qualified to decide the areas on which the assessment will focus? Does an expert in sampling need to be consulted to help in the definition of the sample? Who can best choose an appropriate instrument or develop one specially tailored to local needs? Who should be in charge of carrying out the administration of the instrument, and how much help will he need? Who will analyze the data so that it can be used effectively in determining the desired outcomes? Who must cooperate at each stage of this process, and how can lines of communication be established so that the necessary information will flow to those who need it? Answering these questions and making decisions determining responsibilities and needs at each phase of the assessment is a job that falls on the shoulders of the planner, in cooperation with the advisory group. The fuller the planning and articulation at this stage the more satisfactory will be the outcome of the assessment.

personnel needed

More specific considerations should be addressed in planning the desired outcomes assessment. One is the coordination of this phase of program development with preceding and succeeding phases. This coordination includes several dimensions. The first is time. It's inappropriate to complete the desired outcomes assessment in September, for example, and not have the results of the current status assessment available until June, since defining program needs requires a comparison of the results from the two assessments. Also, it's important to plan the two assessments so that the data from each is comparable. This permits meaningful discrepancies to be determined. Making sure schedules mesh and data are comparable is largely a function of the effectiveness of initial planning.

planning and coordination considerations

Assuring meaningful data is another major consideration for this phase. One must design the desired outcomes assessment in such a way that its results have practical use in the implementation of new programs. If it's outside the practical limits of the district's budget to establish a career education center, complete with library, librarian, computer linkage to a national center, study booths, films, regularly scheduled field trips to a variety of job sites, and lectures by visiting experts in the career education field, then it's pointless to ask students whether they need these things. One can ask questions which determine a general need in a way that permits response within the constraints of available local resources. This is another

meaningful data important

example of how coordination of the desired outcomes assessment with previous and subsequent steps is essential in the initial planning phase.

Another issue that requires early planning and coordination is the determination of the final form of the assessment data. Too often, masses of data have been collected in an efficient and sensible manner, but procedures for tabulating and summarizing them were not considered. When a computer is to be used for this purpose, it is only reasonable to consult a programmer. In smaller scale efforts in which clerks are to accomplish this task, initial planning for tabulating and summarizing data is just as important.

final form of assessment

Planning and coordinating a desired outcomes assessment with advisory groups requires that many issues be taken into consideration in order that numerous decisions can be made. In this step, as in all phases of a desired outcomes assessment and the larger effort to which desired outcomes assessments contribute, it is important to document each decision and the reasons for it. A precise statement of procedures and the rationale for them is valuable for several reasons. Such a statement will facilitate communications and understanding during the course of program development, implementation and evaluation. It may help keep a project true to its original intent and perhaps assist in answering questions which arise as plans are implemented. Finally, a continuous record of program development will ease the task of preparing formal reports on the

documentation a help

project. It is recommended that "write it down" become a guiding principle of the program development effort.

IDENTIFYING THE AREAS ON WHICH THE ASSESSMENT WILL FOCUS

step two

This is the step in the desired outcomes assessment process after planning and coordinating with advisory groups. Once people have been brought on board in the effort, and initial decisions about who will conduct the assessment and what route it will take have been made, a precise focus must be defined for the effort. What is the central purpose of the assessment? Is it to gather information on one or two key areas, or to establish a basis for a comprehensive program? Has a particular problem sprung up recently, such as drug abuse, racial tension, or a high dropout rate, that suggests the need for new information on what students need and want, or is the assessment effort directed at the activities and objectives that have constituted the guidance, counseling, and placement program for the last 30 years? Is a new program being considered for a particular subpopulation of students--those emotionally handicapped, culturally deprived, or of a particular minority group, for example--which suggests that an assessment is needed to focus on the needs of this subgroup? One can define a single narrow focus for an assessment, try to include all needs students might have, or focus anywhere in between, depending on the purpose of an assessment in a given situation. The important point is to decide on the purpose ahead of time, and structure the assessment accordingly. Of course, this

central purpose

purpose should be precisely stated and documented in adequate detail.

The card-sort is a flexible technique which can be adapted to either broad or narrow focuses. For example, the six career areas defined in the Orientation Module of this series of staff development packages may be used separately, or all together, depending on the focus desired for the assessment. Taken together, the six areas cover virtually all student needs and hence, possible desired outcomes, for a guidance, counseling, and placement program. To review, the six career areas are: (1) vocational planning; (2) educational planning; (3) learning how to learn; (4) personal and social development; (5) social responsibility; (6) leisure time use.

six career areas

Reaching a satisfactory definition of the focus of a desired outcome assessment can best be accomplished through establishing a decision process and rules for making the necessary choices. Sample guidelines might include: always select the focus which will be the most cost efficient, or the most unbiased toward a particular student subgroup, or the most acceptable to the community, or the most responsive to a particular local problem or consideration, and so on. By defining the decision process and rules, and by employing them consistently, charges of personal bias or unfairness can be avoided, and a more satisfactory desired outcomes assessment can be completed.

PROGRESS CHECK

1. Communication is a key to planning and coordinating with advisory groups, the first phase of the desired outcomes assessment. List six groups that should be informed of the goals and procedures of the assessment as early as possible. (p. 37)

A. ____________________

B. ____________________

C. ____________________

D. ____________________

E. ____________________

F. ____________________

2. In beginning an assessment process, it is best to: (p. 37)

___A. Avoid excessive publicity, notifying only key personnel
___B. Plan and coordinate with students and parents first
___C. Plan and coordinate with advisory groups first
___D. Arrange for a radio interview to disseminate information

3. A number of planning activities should be accomplished in the initial step of desired outcomes assessment. Check the ones below that were emphasized in the text. (p. 38)

___A. Choose the type of instruments and procedures most appropriate
___B. Select the type of sample
___C. Develop high quality instruments
___D. Select personnel appropriate to each phase of the operation
___E. Train interviewers to carry out the card-sort procedure
___F. Coordinate current status and desired outcomes assessment
___G. Assure meaningful data
___H. Plan orientation sessions for students and adults
___I. Consider computer needs
___J. Write sample items, and pilot test these
___K. Develop a schedule for administration of the instrument
___L. Develop information dissemination strategies

4. In deciding on the focus for a desired outcomes assessment one should consider most carefully: (p. 43)

___A. Idiosyncracies at various school sites
___B. Ethnic minorities and their particular needs and problems
___C. Adult needs as well as youth needs
___D. The central purpose of the assessment

5. The purpose of establishing decision rules for choosing areas on which an assessment will focus is: (p. 44)

___A. To provide consistent guidelines
___B. To avoid charges of bias
___C. To make the decision rationales public
___D. All of the above

ANSWERS

1. (A) Counselors
   (B) Teachers
   (C) Administrators
   (D) Students
   (E) Parents
   (F) Community Representatives

2. C

3. A, D, F, G, I, L.

4. D.

5. D

GROUP ACTIVITY

If possible, meet with several of your fellow planners/counselors. Assign them the following roles: a supportive school board member; a conservative/skeptical board member; the district superintendent; a school principal; and a teacher who is a hard-nosed realist. Imagine they are an advisory group to whom you are proposing the idea of conducting a desired outcomes assessment, and that much of your support will depend on whether you can provide a clear ~~picture~~ of the advantages that accrue from such an effort. You must also clearly describe the initial planning issues that must be considered. Orient the discussion to the following specific topics:

1. The advantages of conducting a desired outcomes assessment.
2. The advantages of the card sort approach (or another approach, if you prefer).
3. What local personnel will be interested and available to help with the various phases of the project.
4. What will be the most meaningful form in which to collect information.
5. What communication strategies will be available to assure necessary dissemination of information at all phases.

Discuss each topic for perhaps 10 to 15 minutes, letting each point of view be represented in the discussion. Jot down important points of contention in each area, and study these. They should provide a good preview of problems to be alert for, and issues to be informed on, as your assessment progresses.

DEFINING AND SELECTING THE SAMPLE

step three

The ideal population to sample in a desired outcomes assessment is everyone who will be affected in any way by the possible outcomes. If a school district's guidance and

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counseling program is conducting the assessment, this means all students, parents, teachers, counselors, administrators, and community representatives in the district. In occasional circumstances this ideal may be approached. If the assessment involves one small school in an isolated community, for example, it may be possible to include all these individuals in the measurement. This is not often the case however, and one is usually forced to adopt a strategy to select representatives from the total population. The key to success in this process is to choose a sampling procedure which insures that the few who are measured reflect accurately the will of all.

It is not easy to choose a representative sample. Many factors tend to work as biasing agents. Students at one school may be brighter or duller than those at another, or may have a different set of problems, perhaps related to their different location. Differences of only a year or two in age may cause substantial variations in the needs students have. To account for these variations, different methods of representative sampling have been developed to ensure fairness. Probably the simplest and most straightforward is simple random sampling. This involves trying to see that only chance determines what individuals are included in the sample. It is particularly appropriate where the possible biasing factors are little known or understood. Usually one establishes a list of all individuals in the largest population, and then randomly enters the list and picks every third or fifth (or whatever number is appropriate) individual to

random sampling

generate the sample. While this is technically only a quasi-random method, it is practical and adequate for your purposes here.

If biasing factors are known, a better means to overcome their effect is stratified sampling. This involves selecting certain factors, such as age, sex, grade level, ethnic identity, or residence location, and deliberately balancing these factors in the sample. If done carefully in a situation where there are important biasing factors, this is the most economical method, as it allows inferences to be made accurately from a smaller number of cases.

stratified sampling

No matter what the method of sampling, there will be some sampling error. There will always be chance differences between the selected individuals and the entire population. With a very small sample, the error will be large. As the sample size increases, the error shrinks. As a rough guideline, the error is inversely proportional to the square root of the number of measurements. In more concrete terms, it is best to include at least 10% to 15% of the target group in the assessment to assure adequate representation.

sampling error

Another important consideration involves the question of what subgroups to include in the sample. Students currently enrolled in the school make up the first, obvious group. But what age group of students should be sampled? And should the sample be chosen by grade level, age level, or school? Is it also worthwhile to gather information from

subgroups

former students, as they have the benefit of hindsight? They could indicate those school services which contributed to their present positions in society or which should have been available to help them reach their goals. Can parents provide another useful perspective, with their unique knowledge of students' backgrounds? Should teachers be included, with their understanding of a central aspect of the students' current life? Likewise, counseling personnel often see students in a way that is more intimate and personal. They may have more insight into the needs and problems of students than either teachers or parents. Community representatives and employers may be able to provide useful information concerning the societal-related needs students have and as yet are largely unaware of. Administrators can provide a useful perspective from the standpoint of school-related student needs. Finally, career development specialists may be more knowledgeable than any of the preceding types of individuals in their understanding of young people's needs and desires, given their study and comprehension in the field. Each of these groups should be considered, and some decision reached as to which to include. Later on, some decision will be called for as to how each group's input should be weighted. But this issue can be considered here too. If it is felt that the opinions of counselors and career development specialists should carry the most weight, perhaps they should be more extensively sampled than the other groups. Or perhaps it will be decided that the only truly relevant measure should be what students themselves say, and all other groups should be ignored. Whatever the decision here, it is an issue that should be faced and intelligently resolved in defining the sample.

Perhaps a useful means of illustrating the definition of a sample is to provide an example of how it might actually be done. The following is such an example. It is not intended as a definition of what should be done in every case, but merely illustrates the process involved and factors to be considered.

example

It was first determined that the following groups in the defined numbers would be selected:

	Actual Numbers
Students--20%	700
Parents--10%	300
Teachers--50%	100
Counselors--100%	13
Administrators--100%	6

Students were selected from a complete alphabetical list of all students at the high school, numbered, and broken down by grade level. Students were stratified on the following criteria: grade point average, rank in class, number of years at the high school, parent occupation, sex, aptitude, and alphabetical breakdown. In this way, a fair representation was insured in terms of most of the important biasing factors in a high school. One parent of each of these students was then chosen, with minor adjustments made to allow for missing parents. Teachers were likewise chosen through the student sample, with an appropriate number randomly selected who were current teachers of the students involved, and an equal number chosen who had been teachers of the students the previous year. Choosing the counselors and administrators, of course, proved no problem, with a 100% representation in each case.

A question that should be considered with any sample is what percent of response is necessary to assure validity. If 500 respondents are chosen, and only 367 actually respond to the survey, does one have meaningful results? Unfortunately, there is no pat answer to this question. Various authorities cite figures anywhere from 50 to 100 percent as acceptable levels of response. The best means of determining adequacy in this regard is to scan the demographic data from those who have participated, compare it with those who have not, and see whether any patterns are apparent. If particular subgroups have been included, and others left out, probably the data is suspect. If there are no such patterns, it is probably valid. In any case, it is best to strive for as full a response level as possible, and to administer the assessment in such a way that respondents are motivated to participate. Participants should be followed up if they fail to respond after one contact.

percentage of response needed

PROGRESS CHECK

You have decided to conduct a desired outcomes assessment in your school district. The district contains five junior high schools (grades 7-9) and three high schools (grades 10-12). The schools are all comparable in size and student makeup. Total district population in grades 7-12 is 7,432. The district's residents are homogeneous in terms of socio-economic status, being middle class with typical annual average incomes. You are working with limited funds, and must assure equal representation in terms of sex and grade level. It has been determined that students should be the primary respondents, but four adult groups should also be lightly sampled: counselors, teachers, administrators, and parents. You are working with district-wide alphabetized lists of students, broken down by grade level.

Determine the following:

1. What percent of each of the groups will you sample?

2. How will you actually pick students from the lists provided?

3. How will you choose the adult populations involved?

4. How will you assure equal representation by sex and grade level?

5. What will you regard as an acceptable response level?

6. How will you check the validity of your data if the response level is below 100%?

Guidelines and examples for checking your answers can be found in the preceding pages.

DEVELOPING THE INSTRUMENTS

step four

You may take a number of courses in obtaining the necessary instruments for a desired outcomes assessment. You may be able to simply adopt an existent set of cards, eliminating the need for any development work. More likely you will need to do some adapting of cards, altering a standard set of statements to fit the particular needs of students in your school or district. Or it may be preferable to develop the cards from scratch, permitting the kind of structure and grouping most desirable at the site in question. Whatever course is taken, certain considerations must be made and a definite set of steps should be followed.

necessary instruments

The first such consideration involves the question of who will evaluate the quality of available cards, and adapt them if necessary, or develop new ones if that course is taken. If very extensive adaptation of existing cards or development of new ones is required, this is a sizeable task, and is usually best accomplished if assigned to someone with the necessary time and resources. This may mean selecting an individual counselor or teacher with appropriate knowledge, or hiring someone from within or outside the school with like qualifications. Adequate financial and time resources must be allocated to assure a quality product, one that has undergone field testing and necessary revision.

the card sort assessment-existent cards

A card-sort student needs assessment instrument has been developed. The first phase of this development was undertaken several years ago. In this phase, a nationwide survey and search was conducted to find the boundaries of a comprehensive guidance system, and to find bases for organizing the broad variety of student guidance needs. Using a survey of the literature and content analyses of available guidance programs, this phase led to the identification of the guidance needs of youth across the country. These needs were categorized into six student-centered areas which should be addressed by any comprehensive guidance system. These six are:

6 areas identified

1. Vocational planning needs
2. Educational planning needs
3. Learning-how-to-learn needs
4. Personal and social development needs
5. Social responsibility needs
6. Leisure time use needs

It can be seen that "vocational planning" needs constitute only part of the emphasis, in which "career" is virtually synonymous with "life." "Educational planning" needs relate to the directions a student wishes to pursue in education apart from the educational requirements for his chosen vocational field. "Learning-how-to-learn" needs, on the other hand, refer to skills which enable an individual to acquire knowledge or, in essence, learn. These include the skills of reading, listening, notetaking, and more. "Social responsibility" needs are broader than the social needs referred to in the personal-social area. The former are needs concerned with being an effective citizen and member of society, while the latter refer to needs related to interacting with persons in small groups. "Leisure" needs refer to the desire to structure or plan the use of free time.

Field tests of this strategy have emphasized assessment of youth needs in four of the six life areas. Assessment materials in the other two areas (social responsibility and leisure) are currently under development. For each area, a list of possible need statements was developed. Each need statement, written on a separate card, describes a type of personal functioning for which a given youth might feel a need to strive. A deck of cards for each life area was developed for youth and adult reactions. This card format allows respondents to consider and make decisions about each individual statement rather than dealing with all statements at once. The areas surveyed, and example need statements from each, follow.

Effective Student Learning Needs

I need to read faster.

I need to be more comfortable when giving information or speaking in class.

I need to understand how I am progressing in each class.

I need to be less nervous when taking exams or tests.

Educational-Vocational Planning Needs (included are those educational planning needs which relate directly to vocational planning)

I need to know what various jobs are like.

I need to know what I can do now to prepare for work that I want to do in the future.

I need to develop plans which will help me reach my educational and occupational goals.

I need to know how to perform well on job applications and in interviews.

Since so many need statements were generated for the Personal-Social life area, this area was broken down into two sub-areas: intrapersonal and interpersonal.

Intrapersonal Needs

I need to get in touch with my feelings and understand how feelings affect my behavior.

I need to "let go" more--to have more fun.

I need a more constructive way to express anger.

I need to increase my ability to keep my promises.

Interpersonal Needs

I need to know the things about me that "bug" others.

I need to be a more sharing and trusting person with others.

I need to speak up for myself more--to be more assertive when the occasion demands.

I need to better solve problems I have with my parents.

For the purpose of obtaining adult reactions, each statement was rephrased so that it began: "Students need..." The available list of need statements is "expandable" in that youth and adults may write their unique needs on blank cards and add them to those presented.

the card sort assessment-creating your own

As opposed to using existent decks of cards, the process of generating original needs statements can be rewarding and useful to those planning a desired outcomes assessment. It can give the planner or counselor a fuller grasp of the needs students have, and force him to spend time gaining an understanding of the full range of such needs. And the process of generating, classifying, and grouping these needs will probably aid in his conceptualizations and make him more responsive to student needs. There are a number of factors to keep in mind if this course is taken. A number of sample cards are usually written and then evaluated to make sure they are appropriate and functional. To be useful as guides to program improvement, each statement must reflect a need to change a behavior, an attitude, or a level of information. The fulfillment of a need must be a condition that is observable and measurable. Vague concepts of psychological needs (such as "emotional security") will not provide much direction to program planners. They should be avoided in writing need statements. Need statements must be meaningful to students. Language and wording should be appropriate to the age or grade level of student involved. A

concerns

statement which reads, for example, "I need to articulate grievances in a less socially reprehensible manner" probably wouldn't have the meaning to a seventh grader than one which reads "I need to better control my temper and language" would. Likewise, statements should reflect real needs of the youth involved. Ignoring such problems as drugs and cigarettes, for example, leaves gaps in areas meaningful to students. Statements should be ones to which students would be willing to respond, and should encourage response. If card statements suggest the need for rationalizations on the part of students, or imply guilt in the way they are worded, they will evoke a negative response to the whole assessment. Students should not feel threatened by the statements. It should be made clear there are no right or wrong answers, and statements should reflect this orientation. Still another consideration is that of including need statements which reflect critical requirements for success in the aspect of life represented. This means zeroing in on significant factors that have been shown to be important in the past. If experience has shown there to be five critical factors in a young person's development of personal and social skills, these should be included prominently in the list of need statements for this area.

In addition to writing the actual items, you will need to draft some directions to go with them. These directions will obviously vary with the type of instrument you have chosen. Some general guidelines apply in almost all cases, however. First, the directions should be as brief and to the point as possible. They should explain the reason for the instrument, and what it is attempting to do. They should tell the respondent precisely what he is supposed to do. Be very concrete in this regard. With questionnaires, if items are to be checked, say so; if circled, indicate that; if written out, indicate the length and form (sentence, phrase, list) of response you want. Often it is useful to include a sample item or two, with the correct form of response clearly demonstrated. If there are time limitations or other pertinent conditions which apply to administration of the instrument, be sure to mention these so that respondents can take them into account. Directions for the card sort procedure are included with the data collection instrument on pages 63 and 64, and in the Appendix, with the orientation materials for students and instructions for interviewers. Well written directions can help considerably in producing consistent and valid data.

direction guidelines

Once a fair sample of statements has been generated, they should be pilot tested. They can be tried out on fellow counselors, and will often receive valuable improvement in the process. Along with this, and more important, they should be tried on a few students comparable to those to be included in the assessment. Suggested improvements should be gathered directly from the students, and from observing how the process goes and what the results are. Suggested changes can then be made.

pilot testing

With this much feedback, the person in charge of generating the cards can usually go on and proceed to develop the entire range of cards necessary for the assessment. This includes generating cards in the numbers appropriate for each of the major areas being measured. It may also involve deciding how cards will be grouped, if this has not been predetermined. If the numbers of needs generated don't balance across the areas it may be necessary to reduce the number of cards in one area, or regroup the cards into more areas. If such a grouping process is used, it is important to keep the groups meaningful to students, and keep them of a manageable size. In the latter regard, one will also need to strike a balance between comprehensiveness of the cards and ease of administration of the assessment. Field tests* to date have indicated that more than a total of 120 cards or more than 30 cards in one group becomes unwieldy. Experience also suggests that the typical problem is one of keeping numbers manageable and still being comprehensive.

balancing the statements

statement range- 30 - 120 cards

Once the complete set of cards has been written and grouped, they should be field tested, along with all other instruments and procedures developed. Revisions suggested by the field test should then be made. The cards should be in a full-scale assessment only after such a process has assured their quality and usefulness.

field testing

The next step in the process of developing instruments is that of generating a data collection instrument. How

*See REFERENCES section.

will the responses of students and adults surveyed be recorded? How will these recorded responses be summarized? Answers to these questions will depend on the development of an instrument on which to collect the data and from which it may be prepared for the computer.

data collecting instrument

This instrument must do a number of things. In as much as the purpose of the card-sort procedure is to determine a list of the high ranking needs of students, the data collection instrument should provide a place for the first five choices among the cards in each group, for example. It should also provide a place for the highest choices across all groups to be listed, so that those areas of highest priority can be determined. It is desirable for students to be able to add statements to those provided, in case important needs are missed in compiling the decks, and a place should be provided to record these. It is also desirable for participants to be able to add additional categories (areas) to those provided, in case important needs are missed in the grouping or categorization itself. The opportunity for participants to contribute open-ended comments, any thoughts they may have on the assessment procedure itself, and reasons why certain needs were important or unimportant should be provided. Finally, the format for this instrument must be such that it lends itself to easy keypunching and summarization in the next step of the assessment.

On the next two pages is an example of such a data collection instrument, one developed for the field tests of the card-sort technique. The instrument serves one additional function beyond those listed in the above paragraph. That is that it allows participants to rank the cards two ways, according to their needs and according to their wants. In this way, students can indicate discrepancies between what their most important needs are, and with which of those they would like the school to help. This assumes there may be some needs that students would rather work out for themselves, making it inappropriate to structure guidance and counseling programs around them. Thus the important category for the program planner becomes the high ranking "wants" of students.

DATA COLLECTION INSTRUMENT

The information you provide today will be anonymous--you do not have to sign your name to this form. There is only one piece of biographical information which will help us understand the groups of students who participate in this study. Please answer the following questions by placing a checkmark in the appropriate space.

Biographical Information

Grade: 1. Ninth-Tenth _____ 2. Eleventh-Twelfth _____

DATA SHEET

(In the appropriate place, write the number of the statement the student selected.)

1. NEEDS

	1st Choice	2nd Choice	3rd Choice	4th Choice	5th Choice
GREEN Academic Learning	____	____	____	____	____
BLUE Educational and Vocational	____	____	____	____	____
ORANGE Interpersonal	____	____	____	____	____
YELLOW Intrapersonal	____	____	____	____	____

2. WANTS ASSISTANCE

	1st Choice	2nd Choice	3rd Choice	4th Choice	5th Choice
GREEN Academic learning	____	____	____	____	____
BLUE Educational and Vocational	____	____	____	____	____
ORANGE Interpersonal	____	____	____	____	____
YELLOW Intrapersonal	____	____	____	____	____

3. Order of top eight choices for assistance:

1st Choice	2nd Choice	3rd Choice	4th Choice	5th Choice	6th Choice	7th Choice	8th Choice
____	____	____	____	____	____	____	____

GRADE: 1. Ninth-Tenth ____ 2. Eleventh-Twelfth ____

4. Write below any "wants" which you selected in your top 20 "Choices for Assistance" that were not covered in the four decks. (Those which you wrote out).

   Academic Learnings Needs (Green) ______________________

   ____

   Educational and Vocational Needs (Blue) ______________________

   ____

   Interpersonal Needs (Orange) ______________________

   ____

   Intrapersonal Needs (Yellow) ______________________

   ____

5. Write below any other <u>areas</u> or categories of needs which are important to you that were not covered by the four decks of cards used. Try to be specific and clear in your responses.

6. Write below any general reactions or comments about this interview or the needs assessment procedures.

7. Write below any additional information you wish to volunteer regarding the needs you selected or your reasons for selecting them.

8. Write below any comments or suggestions about current and possible future counseling and guidance programs and services in your high school.

In conjunction with development of the data collection instrument, you will need to obtain access to a computer. This involves either using an adaptable computer program or developing a specially tailored one which will serve the purpose of summarizing the data, and providing the desired list of high ranking needs or wants. Consultation with a computer programmer is a necessity in this phase.

computer needs

In this consultation, you will need to be able to tell the computer programmer in just what form you wish to have the data. If you use 30 cards per deck, for example, will you simply want the statements ranked from one to thirty, in terms of the frequency with which each was chosen? Or will you want data on which statements were chosen as most important most often? A third alternative is the weighted mean, a figure which indicates top ranking needs or wants by assigning a value to a statement depending upon the order in which it was picked and the number of individuals who picked it. Also, you will need to decide how the raw data should be grouped for analysis. Will you want separate figures for boys and girls? For individual schools within the district? For individual adult subpopulations sampled: counselors, teachers, administrators, parents, community representatives, and so on? For various ages of students: junior and senior high school students, or students in the first and last years of high school, for example? For students from various socio-economic backgrounds? for students in academic and non-academic programs? Each of these questions will require precise answers. The computer is a complex machine; it can present information in a myriad of ways. But it must be programmed properly first, and the computer programmer can do this most satisfactorily if you have first determined exactly what information will be of most use to you.

Thus far the discussion has revolved mostly around use of the card-sort method, one whose advantages have been explained. Space does not permit detailed information on all methods, but a brief look at the questionnaire technique may prove useful. The three steps in the assessment that were presented earlier for the card-sort technique are virtually identical for the questionnaire method (or for any other method, for that matter), but with development of the instruments, obvious differences appear.

questionnaire assessment

A number of questionnaire formats are possible. One is the open-ended written response, in which the respondent tells in his own words the answer to a question, structures his response in the manner which is most meaningful to him, and gives individual insights. This format usually adds to the difficulty of summarizing the information, but does allow for individual expression. A second format is the yes-no questionnaire, in which respondents simply agree or disagree with statements which express opinions on various aspects of the survey's subject. A third example is that in which respondents are provided multiple choice items, and pick the ones that come closest to their view. This allows for greater shadings of opinion than the simple yes-no

types of questionnaires

method, but still provides some structure. A fourth format is that of ranking, in which various needs are listed, and respondents are asked to put them in the order of their importance. This method is similar to the card-sort, but is usually less extensive and lacks the individual attention and provision for added individual responses. A fifth format is rating, in which respondents express on a scale their feeling about the variables.

Many of the rules that govern construction of card sort items apply to questionnaire items. They should be written in a language that is completely understandable to the intended respondents. Jargon and professional terminology should be avoided. They should not threaten respondents, nor be leading and suggestive of a proper response. Each item should deal with just one idea or variable. Groupings and orderings should be meaningful and sensible. A balance should be struck between comprehensiveness and ease of administration, so that respondents' attention span is not exceeded, leading to biased results. Questionnaires should be pilot and field tested to assure quality.

PROGRESS CHECK

1. Look over the following sample statements, intended for a card-sort deck on intrapersonal needs of junior and senior high school students. Each represents one or more common weakness in such statements. Determine for each what the weakness(es) is/are, and briefly detail this after the statements.

   A. I need to confess that I stole some money recently.

   B. I need to self-actualize in the affective realm more often.

C. I need to fight with my classmates less often.

D. I need to show more affection for my stuffed animal collection.

E. I need to be able to identify how many weaknesses and faults I have.

F. I need to eat better, and to get more exercise.

2. You have determined that students are concerned about drugs. You must be sure that this concern is represented in a list of needs statements for the intrapersonal area. Write two needs statements that satisfy all the criteria outlined in the text, and that cover the area of concern about drugs.

A. ______________________________

B. ______________________________

(Since the appropriate answers are not found on any specific pages, check the Answer Key for acceptable responses.)

ANSWERS

1. A. Threatening to the student; implies guilt.
   B. Besides being meaningless, the terminology is too technical.
   C. This is an interpersonal need; it's in the wrong area.
   D. This is removed from most students' needs; it's trivial.
   E. This is negative and threatening to students.
   F. This covers two needs in one statement.

2. Many statements would of course suffice. Two examples of good ones might be:
   A. I need to know more about the effects of drugs.
   B. I need to know where I stand on taking drugs.

GROUP ACTIVITY

Meet with several of your fellow planners/ counselors for an hour or two. Use the time for a brain storming session. Explain that you want to produce a listing of all the major needs your students have. Spend roughly 10 or 15 minutes quickly listing every type of need the group can think of. Then arrange and systematize these in the way that seems most sensible. Next break the group into one and two man task forces (depending on the number of people available and the need groupings developed) to work on filling out and refining each of the areas of needs. Let the task forces work for as long as seems productive. Bring everyone back together for a summary as the time runs out and people become tired. Have each task force report briefly on its progress. Be sure to document all needs and ideas that are generated. This should give you a good start on developing items for an instrument, or if you decide to use an already existent one, on which one to choose. It should also further your conceptualization and thinking regarding the needs of students in your school or district, and help members of your staff understand each other better.

ADMINISTERING THE INSTRUMENTS

step five

A number of tasks must be performed to accomplish actual administration of the assessment, once the instruments are developed. Interviewers must be selected and trained. Respondents must be oriented to the assessment process. Detailed schedules for actual interviews must be worked out and all parties informed of them. And the interviews must be conducted in a way that allows flexibility, so that problems may be corrected and satisfactory results be achieved. Following are some suggestions on each of these points.

interviewers

Interviewers may be drawn from a number of sources. Counselors themselves cannot usually handle the entire load. Outside help must often be sought. Graduate students are one ideal source for such help, if the district is located near a university community. Undergraduates are another such source, providing they are reasonably mature and intelligent. Substitute teachers can serve well in the role of interviewer, and are usually familiar with the school and how it functions. Paraprofessionals who are already working in the school may be available. Community residents are still another source of interviewers. Finally, teachers themselves may be able to help, depending on how interviews are scheduled and whether they will be free. School personnel may ease the process of assessment through their knowledge of normal school schedules but will allow students less feeling of anonymity in giving responses. The number of interviewers needed will depend on the size of the sample, the number of respondents per interview, and the interview schedule. It is usually best to keep the schedule fairly compact, conducting all interviews within perhaps a week, so that school disruptions caused by the assessment don't stretch out too long. Arrangements to pay interviewers should be made in advance, to allow for inevitable delays in processing.

training

Once interviewers are selected, they must be trained. This training has been found to be most effective if it employs a combination of workshops, written material, and practice simulation exercises. The workshops allow the planner to fully acquaint the interviewers with the card-sort process, the relevant information about the school, and to distribute the written instructions and material. Once such instructions have been thoroughly absorbed, practice sessions can be set up which allow interviewers to test their knowledge, role playing with other trainees and switching places so that everyone gets a chance to practice. Usually the training can be accomplished in one half-day session, perhaps even in as little as two hours. But the more thorough it is, the more efficient will be the assessment.

Written instructions play a key role in the training process. They should explain the process interviewers will go through in complete detail. An example of such a set of instructions is presented on pages 124-128 of the Appendix.

It also serves to define in detailed and precise terms just what happens in the interviews. Then instructions are written for use with the four decks of cards mentioned in the last section, and for interviews with six student respondents per interviewer. A close reading of the instructions should give the planner a clear picture of just how the card-sort procedure works in actual administration.

orienting the interviewees

Not only must interviewers be trained, but students must also be oriented to the assessment purposes and procedures. One of the biggest problems that can arise in such an effort is the confusion and lack of cooperation that will ensue if the respondents are not fully informed of the purpose for the assessment, what they stand to gain from it, and what is expected of them in its administration. Orientation sessions are needed to prepare respondents in this regard. If done well, they can produce enthusiastic cooperation, rather than passive acceptance or rebellion. These orientation sessions can be conducted by the interviewers themselves, once they are trained and familiar with the purposes and processes of the assessment. Half hour orientation sessions for class-sized groups (approximately 30 students) have worked well in field tests of the assessment procedure. They allow for questions and a real back and forth communication process. Information can also be presented on the evolving nature of careers and the trends which will influence career planning and development for young people. As with the interviewer training, these orientation sessions have been found to be most effective if they use written material as well as verbal presentations. Sample orientation materials are presented on pages 128 and 129 of Appendix to give the planner an idea of the kind of orientation of respondents (students and adults) that is useful.

One of the issues that will need resolution in training the interviewers and orienting the interviewees is the number of respondents to be included in each interview. Experience has shown six to eight to be the practical limit of one interviewer's ability. The program planner may wish to reduce the number of respondents, to allow more individual attention and ease the burden on the interviewer. Ideally, the system could be used with one respondent per interviewer to allow the card-sort assessment procedure the maximum possible individual attention. As with other aspects of the assessment, a balance must be achieved between the theoretical ideal and practical necessity.

assessment administration schedules and concerns

A process that must accompany the training of the interviewers and the orienting of the respondents is that of working out a detailed schedule for all aspects of the administration of the assessment. This schedule should include the training sessions for the interviewers, the orientation sessions for the students and adults sampled, and the interviews themselves. Many considerations are necessary to develop these schedules. First, regular school schedules should be disrupted as little as possible. Also, available rooms and space must be considered. Make sure room assignments are appropriate to the size of the groups being interviewed. More than one interview at a time may have to take place in a room. Interviews of parents and community representatives are usually best scheduled at night, both for orientation sessions and actual interviews. In some cases, interviewers may have to go to the homes of adult respondents, where problems of transportation or available time exist. The schedule should be set as early in the assessment planning process as possible, and should be made available to all participating groups: students, parents, other adults, school administrators, and most important, interviewers. Obviously, cooperation will be necessary between administrators and teachers in actually calling students when the times come, and in returning them to their regular schedule.

Another essential task involved in administering the assessment is that of notifying all parties of times and places to appear for orientation sessions and interviews, in accordance with the schedule that is established. Students, teachers, administrators, and counselors can be kept in touch through the usual school channels, in most cases. Announcements can be made to remind respondents in advance of upcoming sessions, and schedules distributed to teachers to relay details. Informing parents and community representatives may require a little more work. Newspaper articles should be considered as a means to alert the community to the upcoming assessment. It is best to send those people who will actually be interviewed an advance letter which explains the purpose and procedures of the assessment, as well as defining the sampling procedure through which they were chosen to participate. The shorter and more to the point this letter is, the better. It can end by listing times and places for the orientation sessions, either giving the respondents a choice in which to attend or assigning them to a session.

The orientation sessions can then become a means of distributing the schedules for the actual interviews. This should flow naturally from the explanations of procedures and role playing practice built into the orientation. Students and adults alike should be becoming involved with the process at this point, and this involvement will probably help them to remember the interview time. To assure this, it may be useful to send a follow-up letter reminding adults of the interview time, particularly if there is a very broad time gap between the orientation and the interview.

In an operation as complex as the card-sort needs assessment, there is likely to be an occasional hitch and need for adjustment. Thus schedules are best kept somewhat flexible, so that people may be moved around at the last minute if necessary. Likewise, during the actual time of administration (be it one day or two weeks) it helps immensely to establish an operations headquarters, where those in charge may stay to keep in touch with developments, and where interviewers and teachers may report difficulties that arise. In this way, coordinated solutions may be worked out quickly, and the results of the assessment be kept consistent and of a high quality.

Administering the instruments is the second major phase of conducting a desired outcomes assessment which will vary considerably depending on the kind of assessment chosen. Administering questionnaires, or using a follow-up study, will call for a process quite different from that described for the card-sort. Again, no attempt will be made here to describe these processes completely. But a few thoughts on each may prove useful to the program planner.

questionnaire usage

For the planner who decides to use a questionnaire to sample students and adults, the first difference is that no interviewers will have to be hired and trained. However, this doesn't eliminate the need for consistency in administration of the instrument. Thus, whoever in fact does administer it will need to be oriented, and if several people are involved (such as teachers) they should be trained so that they all follow the same procedures. Class size groups will often work well for written instruments of the varieties described in the previous section. This will aid in devising the schedule, but such a schedule will still need to be documented as early as possible and communicated to all involved groups. Likewise, respondents will still need to be oriented to the purposes and procedures of the assessment, and familiarized with the type of questionnaire chosen. Parents and community representatives may be able to fill out the instruments at home, but this may contribute to poor response rate, and more consistent results are likely if consistent conditions exist for the administration.

In any case, respondents will still need to be oriented, as with the card-sort.

follow-up studies

Follow-up studies are usually conducted entirely through the mail, and this of course leads to a number of variations from either the card-sort or the questionnaire. Since even less involvement is required on the part of respondents in a follow-up study than in a questionnaire, instruments must be kept short. Most students and adults removed from a situation retain only marginal interest in contributing to its improvement. A questionnaire should be either selected or developed, and the suggestions included in the last section in this regard apply equally well to the follow-up study. It is best to send an advance letter to respondents to prepare them for the questionnaire, or at least include a cover letter explaining the purposes and procedures of the assessment and suggesting the importance of acquiring the student's response. A stamped return envelope should also be included. Some researchers suggest that the best time of year to administer such follow-up studies is around Thanksgiving, after the rush of beginning college is over and before the rush of Christmas has started. Students' names should be included on the questionnaire in case they forget to put it there. It may be possible to print the questionnaire items on the back of a data card, with the return address on the front, and if so, this can speed the process of analyzing the data considerably. Mailing costs can be kept low if third class rates are used. Mailing lists can be updated if a request to forward the questionnaire to a changed address is included on the envelope. Follow-up letters should be sent to individuals who do not return their questionnaires. A high response rate is especially important in a follow-up study.

* If you have not read Appendix A material, please do so at this point. Questions 6-12 in the Progress Check are directly related to information found in Appendix A.

PROGRESS CHECK

1. Possible sources of interviewers include: (p. 71)

   A. ______

   B. ______

   C. ______

   D. ______

   E. ______

   F. ______

   G. ______

2. It is usually best to limit the interviewing schedule to a ______ or so. (p. 72)

3. Arrangements should be made early for the ______ of interviewers. (p. 72)

4. Training for interviewers has been found to be most effective if it employs what three elements? (p. 72)

   A. ______

   B. ______

   C. ______

5. Training of interviewers will probably take from ______ to ______ hours. (p. 72)

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6. In indicating needs, students should be told to assume what level of help is possible? (p. 128)

A. The best possible
B. Better than at present
C. What could be reasonably expected
D. Only partial help

7. Students should all work on the same color deck at once. (p. 125)

T ______ F ______

8. When students ask questions during the card-sort, it is best to provide examples for them. (p. 126)

T ______ F ______

9. When recording the cards, you should: (p. 126)

A. Look at all statements carefully
B. Glance at statements occasionally to check your work
C. Look only at the numbers on the back of cards
D. Ask the student to react to the statements as you record the numbers

10. The choice of need or want statements from all four decks is done with: (p. 126)

A. All cards in each deck
B. The top five cards in each deck
C. The top five and bottom five cards in each deck
D. Cards in only one deck at a time

11. Statements added on blank cards are written on the data sheet by: (p. 126)

A. You
B. The student
C. The keypunch operator
D. Fellow students

12. Emphasize throughout the card-sort procedure that students should respond in terms of: (pp. 56 & 128) (several places)

A. Their own needs
B. Their needs and the needs of students like them
C. The needs of all students
D. The needs of boys and girls

13. Orientation sessions for students usually work best in: (p. 73)

A. Groups of three or four
B. Groups of ten or twelve
C. Class-sized groups
D. School-wide groups

14. Student orientation sessions usually work best if they present information on: (p. 73)

A. The purposes of the assessment
B. The processes of the assessment
C. Evolving trends in careers
D. All of the above

15. The upper practical limit for the size of interview groups is: (p. 74)

A. Three to four
B. Six to eight
C. Twenty to thirty
D. Limitless

16. Parents and community representatives are usually best scheduled: (p. 75)

A. At lunch time
B. At night
C. Early in the morning
D. At mid-afternoon

17. An important consideration in designing schedules is: (p. 74)

A. The regular school schedule
B. Available space
C. Size of the interview groups
D. All of the above

18. Design a theoretical schedule for interviewing 100 students selected randomly from the 10th grade at one school, using that school's regular schedule and available space as guidelines, and assuming groups of six students each. (See Answer Key)

____

____

____

____

____

____

1. A. Counselors
   B. Graduate students
   C. Undergraduate students
   D. Paraprofessionals
   E. Substitute teachers
   F. Housewives
   G. Teachers

2. Week

3. Payment (selection, training are also OK)

4. A. Written materials
   B. Workshops
   C. Simulation (role playing) activities

5. 2 to 4

6. A

7. F

8. F

9. C

10. B

11. B

12. A

13. C

14. D

15. B

16. B

17. D

18. This assessment will entail 17 groups. The schedule should be within one week or less. Consider the number of interviewers you have, to plan the number of interviews that can be simultaneously conducted. Then be sure this number of rooms is available.

ANSWERS

GROUP ACTIVITY

Meet with several of your fellow planners/counselors. Imagine that they are to be interviewers in the administration of the card-sort to students (which they may be), and that you are responsible for training them. They should play the role of skeptical trainees, questioning the process wherever they can. You should provide answers to their questions from the "Instructions to Interviewers" (Appendix) and your own knowledge. If you become stymied, stop the role playing temporarily and work out satisfactory answers with the group. Keep a written account of all questions and problems that arise.

When all questions are answered and problems worked out, have the group members divide into pairs and actually practice going through the sorting process, one acting as the interviewer and the other as the student. Again, encourage questions, and continue to keep a written account of problems and questions.

When you have finished this group activity you should have accomplished several things. The counselors involved will be able to help with training other interviewers, and to help conduct the interviewing themselves; everyone's knowledge of the process will be increased; many of the questions and problems that might come up will have been explored and resolved; and you will have a list of issues to be informed on, and to cover in the real training.

SUMMARIZING AND ANALYZING THE DATA

step six

It is at this point that earlier planning concerning the computer will pay off. The data must be transferred from the Data Collection Form to keypunch cards so that they can be summarized by the computer. This will require the services of a keypunch operator, and a computer programmer or technician to conduct the actual run. Along with this, the individual open-ended responses and added statements will need to be gathered, grouped, and listed or summarized. Groupings and listings can take a variety of forms, but usually follow the same breakdowns used for the computer (by age/grade level, sex, or adult subgroup, for example), as well as the natural content breakdowns into which the comments and thoughts fall.

key punch data

The next task is the interpretation of the summaries that come back from the computer. The illustration shown on page 87 gives an example of a printout sheet, showing the information as it was summarized in the field test. The information at the top of the page shows that the data refers to ninth grade teachers, and specifically to their responses to the Academic Learning deck of cards. The first column on the left lists the statements (cards) by number. The next column shows how many times each was chosen as the most important by teachers, followed by its accorded rank (the lower the rank numerically the higher its importance). The next four columns show how many times each was chosen second, third, fourth, and fifth, respectively. Following that, the

analyzing and interpreting data

ADULTS, NINTH GRADE

TABULATION BY POSITION: TEACHERS

NEEDS GROUP A: ACADEMIC-LEARNING

DATE: 02/13/73 TIME: 18.52 RELATIVE CASES = 65 TOTAL CASES = 156

NEED NUMBER	1st CHOICE	RANK	2nd CHOICE	3rd CHOICE	4th CHOICE	5th CHOICE	WEIGHTED MEAN	RANK	RELATIVE PERCENTAGE	RANK
1	1	19.	0	1	2	1	2.6000	24.5	7.7	21.
2	0	0.	5	1	1	2	3.0000	14.5	13.8	13.
3	6	3.	11	7	9	2	3.2857	6.	53.8	1.
4	2	13.5	3	2	5	1	3.0000	14.5	20.0	8.5
5	0	0.	0	0	0	1	1.0000	32.	1.5	31.5
6	1	19.	0	3	2	1	2.7143	22.	10.8	17.
7	0	0.	0	0	0	1	1.0000	32.	1.5	31.5
8	6	3.	6	3	4	4	3.2609	7.	35.4	4.
9	2	13.5	0	3	2	3	2.6000	24.5	15.4	12.
10	3	8.5	0	2	1	2	3.1250	8.5	12.3	15.
11	3	8.5	0	3	4	1	3.0000	14.5	16.9	10.5
12	0	0.	3	5	1	2	2.8182	19.	16.9	10.5
13	3	8.5	4	2	2	4	3.0000	14.5	23.1	7.
14	5	5.5	8	3	7	4	3.1111	10.	41.5	2.5
15	0	0.	2	1	0	1	3.0000	14.5	6.2	25.5
16	2	13.5	1	2	2	1	3.1250	8.5	12.3	15.
17	2	13.5	2	3	1	0	3.6250	3.	12.3	15.
18	0	0.	2	7	2	2	2.6923	23.	20.0	8.5
19	1	19.	1	1	1	1	3.0000	14.5	7.7	21.
20	0	0.	0	0	1	0	2.0000	28.5	1.5	31.5
21	1	19.	0	1	0	2	2.5000	26.5	6.2	25.5
22	0	0.	0	0	0	1	1.0000	32.	1.5	31.5
23	0	0.	1	0	1	4	1.6667	30.	9.2	18.5
24	1	19.	1	0	1	1	3.0000	14.5	6.2	25.5
25	0	0.	1	0	0	1	2.5000	26.5	3.1	29.
26	0	0.	2	1	1	1	2.8000	21.	7.7	21.
27	2	13.5	0	1	1	0	3.7500	2.	6.2	25.5
28	2	13.5	0	2	0	2	3.0000	14.5	9.2	18.5
29	5	5.5	5	2	3	3	3.3333	5.	27.7	5.
30	7	1.	2	2	1	4	3.4375	4.	24.6	6.
31	6	3.	3	4	8	6	2.8148	20.	41.5	2.5
32	0	0.	0	2	0	2	2.0000	28.5	6.2	25.5
33	3	8.5	1	0	0	0	4.7500	1.	6.2	25.5
34	0	0.	0	0	0	0	0.0000	0.	0.0	0.
35	0	0.	0	0	0	0	0.0000	0.	0.0	0.
36	0	0.	0	0	0	0	0.0000	0.	0.0	0.
37	0	0.	0	0	0	0	0.0000	0.	0.0	0.
38	0	0.	0	0	0	0	0.0000	0.	0.0	0.
39	0	0.	0	0	0	0	0.0000	0.	0.0	0.
40	0	0.	0	0	0	0	0.0000	0.	0.0	0.
OMITTED	1		1	1	2	4	2.2222		13.8	

Needless to say, all these printouts mean there is a great deal of data to be analyzed. The next task is thus to determine who is best qualified to do this analysis. If counselors have been involved with the assessment effort from the start, they may be excited enough to finally have some results to work with that they will be eager to dig into the data themselves. If not, it may be necessary for the planner to choose or hire someone with the time available to serve in this role.

personnel

Closely related to deciding who will analyze the data is deciding how different sets of data will be weighted in the analysis. Will the first choices be counted most heavily, or the relative percentage? How will these figures be reconciled where there are differences? Will the weighted mean be worked into the calculations in some way? Perhaps more important than these questions are those concerning how the responses of various subgroups will be weighted. Will counselors' opinions be counted more heavily than teachers', for example? Parents' opinions more than administrators'? How will the responses of students and adults be weighted? Should student opinions be counted most important, adult opinions relatively little? Still another question is how open-ended responses and added statements will be integrated with printout data. Rules should be determined, probably in conjunction with the advisory group, to guide analysis of the data and to assure fairness and the balance of results desired.

weighting of data

Once these rules have been determined (and documented for future reference and assured fairness), the process of analysis can begin. If counselors are the ones to conduct this analysis, they will need to be trained by the program planner to interpret the printout sheets and to follow the rules determined for integrating and weighting the information. Planners must also be available to provide technical assistance and resolve difficulties that arise during the process of data analysis.

PROGRESS CHECK

Fill in the answers to the following questions by selecting the correct responses from the list of ten statements that follows. For each question, put the statements in the correct chronological order, listing them by number. Each statement is to be used only once.

1. List three tasks which must be carried out related to the computer summary: (p. 85)

   A. ____________________

   B. ____________________

   C. ____________________

2. List three tasks which must be carried out related to the added statements and open-ended responses: (p. 85 & 86)

   A. ____________________

   B. ____________________

   C. ____________________

3. List two kinds of weighting rules that must be developed and documented: (p. 88)

   A. ____________________

   B. ____________________

   C. ____________________

next column gives the weighted mean: the relative percentage of times the need was high within the top five, as opposed to fourth or fifth, for example. Rankings according to weighted means follow. Finally, the percentage of times the need was chosen within the top five is given, and the ranks according to this computation. Thus need number three is highest, having been chosen 53.8% of the time within the top five, and therefore ranking number one. Such printout sheets were produced across all adult groups at the ninth and twelfth grades, across all students at those levels, and also broken down by adult subgroups and by schools (seven) for students. In addition, totals were produced for each of the four decks of cards, and across all decks.

4. List two tasks the planner must carry out related to personnel in this phase: (p. 88)

A. ______________________________

B. ______________________________

Statements from which to choose are listed below:

1. Deciding on respondent subgroup weighting rules for data analysis
2. Conducting the computer run
3. Integrating the added statements and open-ended responses with the computer data
4. Training selected personnel for the data analysis
5. Interpreting the computer printout sheets
6. Producing a written summary of the added statements and open-ended responses
7. Deciding on statistical weighting rules for the data analysis
8. Selecting appropriate personnel to analyze and summarize the data
9. Keypunching the data onto computer cards
10. Gathering the added statements and open-ended responses and deciding on groupings for them

ANSWERS

1. A. 9
   B. 2
   C. 5
2. A. 10
   B. 6
   C. 3
3. A. 7
   B. 1
4. A. 8
   B. 4

APPLYING THE RESULTS TO A DEFINITION OF THE DESIRED OUTCOMES

step seven

Integrating the data from all the sources and summarizing it in terms of high and low ranking needs or wants produces a full-blown listing of these across all areas. Particularly significant in this listing are the items at the top and bottom ends of the rankings. The former are high priority items around which to plan a program. The latter should be carefully compared to present program priorities to consider ways in which efforts in these areas may be made more efficient. Then more efforts will be available for high need areas. This process will be discussed in the next module in this series. Also useful is the analyzing of which areas rank the highest, as well as the particular items within them. Should Academic Learning needs turn up in six of the top ten rankings, for example, this suggests something important about the program direction.

high priority areas

It may be useful to break down the overall results into subsections, relating to particular content areas or to subgroups within the sampled population. Perhaps conditions are very different at one junior high school than another, and these differences, which would likely be reflected in both parent and student data, suggest some need for individual variation within the district in program orientation. In short, the data should be used in the most intelligent way possible, and only a planner in a given locale can determine exactly what this means in his instance.

subgroup considerations

Probably the most important task in this last phase of desired outcomes assessment is producing a document which summarizes the outcomes of the assessment in a way that is useful for the subsequent steps of program development, and for disseminating the results to others. The planner will need to consider the best format for these purposes, and structure the document accordingly. He will need to consider who can best aid in writing the document. He will have to decide on reporting strategies to various groups (which probably should include at least the various subgroups in the sample population) and the advisory group. For the general populace he will probably keep the report short and concise, briefly touching on the central findings. Also, the language should avoid technical jargon, and be readable by any district parent or resident. For students a similar format and structuring is probably most appropriate. The report to teachers, administrators and those more closely involved will probably be more effective if it goes into more detail. And the report for the counselors and the advisory group should be quite detailed. It can employ the technical language and include detailed considerations avoided for the other groups.

summarizing and reporting results

As a part of this document, or perhaps along with it, the planner should produce a written statement which summarizes the whole desired outcomes assessment process he has gone through. This should describe what happened in each phase of the process, the central purposes behind it, directions chosen and their rationale, decision rules arrived at

documentation of assessment proceedings for important phases, and any other information essential to an understanding of the assessment process. It should include some background and history of the locale, and the events that led to the assessment. Such a document becomes invaluable with the passage of time, and will serve well to fulfill immediate communication needs with various groups as well. Following is an outline for such a document, one which assumes the assessment was district-wide.

summary outline

I. Background and Purposes of the Planning Activities

II. Planning Activities at All Schools

A. Design
B. Sampling
C. Instruments
D. [illegible]a Collection Procedures and Schedule
E. Data Analysis Procedures

III. Results, Conclusions, and Implications (by school)

A. School Number One--High and low needs and wants as perceived by students and adults (including resolution of discrepancies) related to the desired program.
B. School Number Two--
C. Etc.

IV. District-wide Summary, Conclusions, and Recommendations

The above document, and particularly the summary of high and low needs and wants related to the desired program, must be submitted to the advisory group. With completion of this step, the planner is ready to move on to the next phase of program improvement, that of comparing the information produced by the current status assessment and the desired outcomes assessment to determine program needs and changes. He is also ready to move on to the next package (module),

GROUP ACTIVITY

Meet with several of your fellow planners/counselors for roughly an hour. Have them pretend they are members of your advisory board, and that you are presenting the results of the desired outcomes assessment to them. Explain the outline of the report and the form the information will be in when it is actually presented. Have them look for holes and gaps, taking the point of view of actual individuals on the advisory board. Looking back from the perspective of a completed assessment, when you are about to use the information that was produced, can often provoke valuable insights. Keep a written account of points brought up, and be sure to account for them when you design your real-life assessment.

SUMMARY

You have now covered a substantial body of material which includes:

(a) An overview of desired outcome assessments, including their rationale, the nine dimensions on which approaches vary, and five practical examples of methods that have actually been used.

(b) A detailed account of points to be considered during the following seven steps of the assessment process:

1. Planning and Coordinating with Advisory Groups
2. Identifying the Areas on Which the Assessment Will Focus
3. Defining and Selecting the Sample
4. Developing the Instruments
5. Administering the Instruments
6. Summarizing and Analyzing the Data
7. Applying the Results to a Definition of the Desired Outcomes

(c) Eight Progress Checks and Four Group Activities.

The Simulation Activity which follows will give you an opportunity to apply the knowledge and skills you have gained to a theoretical situation, and run through each of the steps to practice your abilities. Next, the Application Procedures will offer suggestions and guidelines for applying your knowledge and skills to your own real-life situation. Following that is a post-test which will permit you to see whether you have achieved all the objectives of the module. Finally, additional references are listed in case you wish to pursue your study of desired outcomes assessments further.

SIMULATION

The questions on the next page relate to the theoretical situation described below. Read over that description and then proceed with the exercises that follow. (May be done as small group exercise.)

You are the district administrator of guidance and counseling for the Lillington School District, a suburban district made up of seven elementary schools, four junior high schools, and two high schools. Of late you have sensed that the schools are having several problems. Students' dissatisfaction with the role the school is playing in their lives seems high, their preparation for the world they find on leaving school seems weak, and their need to better adjust to personal problems has been in evidence recently. In addition, there has seemed to be a kind of drift in the guidance and counseling department, and you sense a lack of real coordination among the efforts of various counselors. The department has no generally defined goals and objectives at this point. You are thinking of undertaking a desired outcomes assessment, but have limited funding available. The district is becoming increasingly diverse. One end of it is still largely rural, while the other end is rapidly urbanizing. The two junior high schools (to be referred to as numbers 1 and 2) and one high school (number 3) serving the rural part of the district are relatively old and small. Their urban counterparts, junior high

schools numbers 4 and 5 and high school number 6, are newer, larger, and more complex. Families in the more urban area have an average of $3,000 per year higher incomes.

The population breakdown for the six schools is (grades 7-9 are junior high school; 10-12 are high school):

School:	1	2	3	4	5	6
Subgroups:						
Students	431	450	802	981	1,358	2,193
Administrators	1	1	2	2	2	4
Teachers	19	18	38	37	54	83
Counselors	1	1	2	2	3	5

Alphabetical lists of students broken down by grade level are available for each school. Alphabetized lists of administrators, teachers, and counselors are also available for each school. Lists of teachers are broken down by subject area and grade level.

1. Write a definition of the purposes of the desired outcomes assessment, and describe how information that will be gathered will help in dealing with these.

2. Choose and justify the type of desired outcomes assessment procedure you will use.

3. Define the precise focus for the assessment, and suggest ways you might find additional information to help you in this task.

4. Define the sample for the assessment, including:

a. The subgroups you will include.

b. How the sample will be divided across schools.

c. The actual number of respondents to be included in each subgroup.

d. The process you will use to arrive at the actual numbers.

e. How you will attempt to assure a representative sample (mention all variables allowed for in this regard).

f. How you will actually pick the names.

g. What you will regard as an acceptable response level.

h. How you will check the validity of your data if the response level is below 100%.

5. Draft 20 sample items to fit the procedure you chose in question 2. Include each of the areas of focus you have defined in question 3. Be sure your sample items are:

   a. Behaviorally measurable variables
   b. Meaningfully worded for students
   c. Concerned with important variables
   d. Grouped appropriately
   e. Non-threatening to students
   f. Touching on only one variable each
   g. Non-leading

   Also draft a brief set of instructions for use with the items. Use non-module paper for these activities, and keep your drafts with the module when you have finished.

6. Pilot test your 20 item instrument by finding a group of 10 to 15 available and appropriate subjects (students, fellow planners/counselors, boy/girl scout troop, group of neighborhood youth) and conducting an actual administration, with all procedures and conditions as they would exist in reality. Briefly describe the process, and mention any serious problems that arose.

7. Summarize your data in table form, and write a brief narrative that highlights the major "findings" of your study.

SIMULATION FEEDBACK

1. The desired outcomes assessment will serve many functions. It will give you precise empirical data on the needs of the district's youth, thereby determining the extent of those problems you have sensed, and others you may not have sensed. It should help to unite counselors around common goals scientifically arrived at. In leading to behaviorally defined goals and objectives it should remove the drift from the department and put it on a well-defined course which allows for measurement of progress and success. By having comprehensive, district-wide, reliable information on students' needs relative to the role of school in their lives, their post high school worlds, and their personal problems, you can not only improve student attitudes about school, but give them more self confidence about their future, better opportunities for career success, and better feelings about themselves. Some of these objectives will work to improve academic performances as well.

   You may have included other thoughts and suggestions in your response. Many good ones are possible. The above summarizes a few.

2. With a district this large you can probably eliminate personal interviews if you hope to include a representative sample. Since you want information from current students, the Delphi Technique and Follow-Up Study seem out. If you had predefined goals you wanted to define behaviorally, the Critical Incident Technique might work; but you don't. This leaves any one of

an assortment of questionnaires or the card sort. One criterion to consider in choosing among these is the amount of funding. Since yours is limited you will either need to choose a careful sampling procedure or use a fairly brief questionnaire. Another criterion concerns how comprehensive you would like your data to be. Still another concerns the form in which you would like it to appear. No one choice is absolutely correct; this is up to you. But be sure you have considered these factors in making your choice.

3. Again, no one "correct" answer exists. But the indications you have suggest that you need to learn about students' attitudes toward school and the causes for those attitudes, career and vocational education needs of students, and the kinds of student personal problems most prevalent. Perhaps a survey of counselors might help to determine additional important areas to probe into. Likewise, teachers may have suggestions to offer. Student leaders represent another good source of information at this formative stage. Remember, you're defining the areas you want to learn about, not yet writing specific items.

4-7. These responses will depend on your previous decisions and responses, and your own judgment. They provide practice toward conducting your own real-life desired outcomes assessment. If there are questions or problems, go back and check the appropriate sections of the module.

APPLICATION PROCEDURES

All responses in this section should be appropriate to your own setting. The questions are designed to help you think through the factors and problems that should be considered so that you can actually conduct your own desired outcomes assessment. Jot down any responses, examples, or guidelines you can think of for each.

1. What are the conditions that argue for a desired outcomes assessment? Against it? Review pages 19 through 22 in the Overview section if you have forgotten the factors that usually pertain in such considerations.

2. Who would probably be on your advisory board? How might you design the ideal advisory board? How will the makeup of this board affect the orientation and scope of the assessment?

3. What personnel are available to help with such an assessment? Specifically, who can help with:

   a. Initial planning?

   b. Defining and selecting the sample?

   c. Writing instruments?

   d. Administering the instruments?

   e. Keypunching computer cards, programming the computer and managing the computer run, analyzing printout sheets, integrating open-ended responses, and producing a data summary?

   f. Writing a report which summarizes the desired outcomes and the assessment process?

   g. Disseminating information at various stages?

4. What would be key areas on which to focus an assessment? Does the present philosophy of your department provide suggestions? Do already apparent needs for change suggest directions? How do your particular conditions--district locale, socio-economic status, and present trends--bear on the issue?

5. What assessment procedure seems most appropriate given your conditions and needs? Do the advantages of this procedure argue convincingly for its use? Are the disadvantages minimized by your situation? Consider alternatives.

6. Define precisely what information would be most helpful in providing solutions to the problems you face? In what form would this information be most useful? How extensive should it be? Consider alternatives--are there other kinds of information that would work equally as well?

7. Have there been any barriers to conducting a desired outcomes assessment to date? What are they? Have you encountered any resistance to solving the problems a desired outcomes assessment will help with? Are there ways to overcome these now, with the help of the assessment?

8. What kind of time frame do you envision for conducting the desired outcomes assessment? When would you start? When would you complete the planning stages? Instrument development? Administration? Data summaries? Reports of the findings? What are alternative schedules? Which is most ideal? Most feasible?

9. Imagine yourself looking back on an assessment effort, with a completed report in your hand. What does the report tell you that you don't know now, but would like to know? What key information has been added so that programs may be improved? Be sure to plan for obtaining these types of information when actually designing your assessment.

10. How will you coordinate the desired outcomes assessment and current status assessment? Assure meaningful comparison data from the two? Coordinate the time schedules for the two? Produce a list of goals and objectives for your program from a study of the two? Answers to these questions and help with this task are provided in the next module.

POST ASSESSMENT

If you have read the instructional material in this module carefully, and completed each of the progress checks and exercises, then answering the questions in this post test will be largely a matter of reviewing your previous responses. In any event, it provides a useful final check on whether you have achieved the objectives set out at the beginning of the module. (p. 7)

1. Define each of the following in a sentence:

   Current status assessment:

   Desired outcomes assessment:

   Needs assessment:

   Explain the relationship among the three in a brief paragraph:

2. Write a paragraph defining the purpose and importance of conducting a desired outcomes assessment. (pp. 19-22)

3. Describe in a sentence each the nine dimensions on which desired outcomes assessment approaches vary, as they were described in the module. (pp. 22-27)

   A.

   B.

   C.

   D.

E.

F.

G.

H.

I.

4. Describe briefly five alternative desired outcomes assessment approaches that have been used in the past, and state one advantage and one disadvantage for each. (pp. 29-33)

A.

Advantage:

Disadvantage:

B.

Advantage:

Disadvantage:

C.

Advantage:

Disadvantage:

D.

Advantage:

Disadvantage:

111

E.

Advantage:

Disadvantage:

5. List the seven steps common to all desired outcomes assessments. (pp. 35-36)

A.

B.

C.

D.

E.

F.

G.

6. Write a brief paragraph which describes the purpose and importance of planning and coordinating desired outcomes assessments with the advisory group(s), including the principal types of activities necessary to accomplish this step. (pp. 37-39)

7. List three important factors that should be considered in identifying the areas on which the desired outcomes assessment will focus. (pp. 43-44)

A.

B.

C.

8. Define:

A. Three important considerations in selecting the sample: (pp. 48-50)

1.

2.

3.

B. Two alternative sampling strategies:

1.

2.

C. The procedure most appropriate to your situation:

D. The rationale for this choice:

9. List:

A. Three important considerations in developing the instruments and procedures for a desired outcomes assessment: (pp. 57-61)

1.

2.

3.

B. The steps you will go through in this development:

1.

2.

3.

C. Ten examples of items you have generated for your instrument:

10. List:

A. Three important considerations in administering the instrument you have developed: (pp. 71-79)

1.

2.

3.

B. The steps you will go through in this administration:

11. Identify three appropriate procedures involved in summarizing and analyzing the data you have collected: (pp. 85-89)

A.

B.

C.

12. Summarize three important considerations in applying the results of your data analysis to a definition of the desired outcomes for your program: (pp. 91-94)

A.

B.

C.

13. Identify: (pp. 92-94)

A. Three target audiences for your report which summarizes the procedures and products of your desired outcomes assessment:

1.

2.

3.

B. The topics of your report:

C. Ways in which the report will be tailored to each of the audiences listed in part A of this question:

1.

2.

3.

POST ASSESSMENT FEEDBACK

1. Define each of the following in a sentence: (p. 7)

   Current status assessment: The empirical determination of the objectives, activities, resource allocations, and outcomes of a program as it now exists.
   Desired outcomes assessment: The empirical determination of the gap between current status and ideal status for either an individual or a program.
   Needs assessment: The empirical determination of the gap between current status and ideal status for either an individual or a program.

   Explain the relationship among the three in a brief paragraph:

   Current status measures where things are at present, desired outcomes measure where they would be ideally, and needs represent the gap between these two.

2. Write a paragraph defining the purpose and impo tance of conductin a desired outcomes assessment. (pp. 19-22)

   There are numerous reasons to conduct desired outcomes assessments. They supply the means for accountability in guidance and counseling programs; give concrete empirical data around which to structure programs; identify youth needs rather than system needs; provide comprehensive data instead of isolated guesses; increase program coordination; and initiate a process of planning and evaluation designed to keep programs abreast of the present.

3. Describe in a sentence each of the nine dimensions on which desired outcomes assessment approaches vary, as they were described in the module. (pp. 22-27)

   A. Direction and Content of Focus--This refers to the nature of the content of the approach, whether it has a problem or solution focus, or some other focus.

   B. Breadth of Focus--This refers to how broad ranging and comprehensive the assessment will be, whether it will delve deeply into one or two areas, or more lightly into many.

   C. Depth of Coverage--This refers to the overall length of of the assessment, how deeply it probes into the areas it does focus on.

D. Degree of Structure--Assessments can ask for highly structured responses, such as checks or rankings, or for open ended responses, which allow the respondent to phrase his own response.

E. Personalization--Some assessments are administered to thousands impersonally, others to a few through personal interviews. The degree of personal attention received by the respondent is the referent.

F. Sampling Considerations--This refers to who will be included as respondents in the administration of the assessment.

G. Quality-- Four factors are particularly important in determining the quality of an assessment. They are validity, reliability, generalizability, and replicability.

H. Availability and Costs--This refers to whether instruments and procedures are commercially available or must be individually developed, and in either case the expense involved.

I. Ease of Administration--Appropriateness of the instrument, ease of data processing, time of administration, amount and nature of training, scheduling flexibility, and practical usability all pertain here.

4. Describe briefly five alternative desired outcomes assessment approaches that have been used in the past, and state one advantage and one disadvantage for each. (pp. 29-33)

A. The Card Sort--Asks respondents to rank statements each printed on a separate card in terms of their importance to him.

Advantage: Flexible, fairly personal, provides structure while allowing for individual responses, gives a ranking of needs.

Disadvantage: Less generally available than the questionnaire, and more complex to administer, usually using a smaller sample.

B. The Questionnaire--Paper and pencil instruments which have the individual respond by checking, rating, choosing among several choices, ranking, or writing in his own response.

Advantage: Most widely available and easy to administer, permits a large sample.

Disadvantage: Often provides less depth of coverage, involves participants less, lacks personalization.

C. The Follow-Up Study--Usually a questionnaire, administered to respondents now removed from the program on which they are supplying information, usually administered through the mail.

Advantage: Gives benefit of hindsight, instruments easy to develop because they are usually brief, administration fairly easy.

Disadvantage: Impersonalization, narrowness of sample, lack of deep coverage.

D. The Critical Incident Technique--A means of defining goals behaviorally through observational techniques, and then assessing the current status and needs relative to the behaviorally defined goals.

Advantage: Uses valuable observational techniques, goes into depth, involves participants.

Disadvantage: Requires training, extensive work, and uses predefined goals.

E. The Delphi Technique--A means of sampling experts (usually) and giving them feedback from others which is useful in bringing diverse opinions together and arriving at desired outcomes and goals.

Advantage: Prompts deep exploration, elicits fine distinctions, provides good insights, aids in ranking priorities.

Disadvantage: Narrow sample, much work in terms of tabulation, record keeping, and mailing, and provides consensus, which may be a disadvantage.

5. List the seven steps common to all desired outcomes assessments. (pp. 35-36)

A. Planning and coordinating with the advisory group(s).

B. Identifying the areas on which the assessment will focus.

C. Defining and selecting the sample.

D. Developing the instruments.

E. Administering the instruments.

F. Summarizing and analyzing the data.

G. Applying the results to a definition of the desired outcomes.

6. Write a brief paragraph which describes the purpose and importance of planning and coordinating desired outcomes assessments with the advisory group(s), including the principal types of activities necessary to accomplish this step. (pp. 37-39)

This is important to assure enthusiastic cooperation from the body which will be able to put the results of the assessment to use in making real improvements. Planning activities which are key include: communicating the purposes and procedures of the assessment to those to be involved and affected; choosing the best procedure for the assessment; planning subsequent steps and finding personnel to fill the necessary roles; coordinating this phase with the current status assessment; assuring meaningful data; and making necessary considerations for computer use.

7. List three important factors that should be considered in identifying the areas on which the desired outcomes assessment will focus. (pp. 43-44)

A. Defining its purpose.

B. Considering various procedures and their usefulness related to the defined purposes.

C. Establishing decision processes and rules, and documenting these.

8. Define: (pp. 48-50)

A. Three important considerations in selecting the sample:

1. Assuring a representative sample.

2. Minimizing sampling error by including adequate numbers.

3. Selection of subgroups to be included.
Also: Assuring adequate response level and validity.

B. Two alternative sampling strategies:

1. Simple random sampling.

2. Stratified random sampling.

C. The procedure most appropriate to your situation:

Correct response is specific to your situation.

D. The rationale for this choice:

Correct response is specific to your choice. Be sure you have justified your choices related to items 8A and 8B above.

9. List: (pp. 57-61)

A. Three important considerations in developing the instruments and procedures for a desired outcomes assessment:

1. Write high quality items (using a number of criteria).

2. Write clear and useful directions.

3. Plan adequately for computer use.

B. The steps you will go through in this development:

1. Generate sample items.

2. Pilot test these and revise accordingly.

3. Select items to be included in the instrument.

4. Develop a data collection instrument.

5. Field test the entire instrument and procedures.

C. Ten examples of items you have generated for your instrument:

Correct response is specific to the individual. However, be sure your items meet all the criteria defined in the module and listed succinctly on p. 87 in the Simulation Exercise.

10. List: (pp. 71-79)

A. Three important considerations in administering the instrument you have developed:

1. Choosing appropriate places and times for administration.

2. Communicating necessary information to all involved.

3. Building in flexibility to allow for problems.

(Other correct responses are possible here--many considerations pertain)

B. The steps you will go through in this administration:

1. Select and train interviewers.

2. Orient respondents.

3. Develop detailed schedules for all aspects of administration.

4. Provide necessary information to all involved parties.

5. Establish an operations headquarters.

6. Collect the data.

11. Identify three appropriate procedures involved in summarizing and analyzing the data you have collected: (pp. 85-89)

A. Keypunching computer cards, conducting the computer run, and interpreting printout sheets.

B. Gathering, grouping, and integrating added statements and open-ended responses.

C. Developing statistical and subgroup weighting procedures.

12. Summarize three important considerations in applying the results of your data analysis to a definition of the desired outcomes for your program: (pp. 91-94)

A. Noting items and areas that rank high and low in the data summary.

B. Applying the data intelligently to your situation.

C. Producing a document which summarizes the outcomes of the assessment and the process used for it.

13. Identify: (pp. 92-94)

A. Three target audiences for your report which summarizes the procedures and products of your desired outcomes assessment:

1. Students and the general populace.

2. Teachers and administrators.

3. Counselors and the advisory group.

B. The topics of your report:

I. Background and Purposes of the Planning Activities
II. Planning Activities at All Schools (Design, Sampling, Instruments, Data Collection Procedures, Data Analysis)
III. Results, Conclusions, and Implications for Each School
IV. District-wide Summary, Conclusions, and Recommendations

C. Ways in which the report will be tailored to each of the audiences listed in part A of this question:

1. Students and the general populace--Keep it short and concise, avoid technical language.

2. Teachers and administrators--Include more detail.

3. Counselors and the advisory group--Include all the information necessary and relevant, and any required technical language.

REFERENCES

If you want more general information on assessment, check:

Fitzgerald, Peter. Assessing the Perceived Educational Needs of Students. Education, Vol. 92, No. 3 (Feb.-Mar., 1972), 13-14.

Kaufman, Roger and J. Richard Harsh. Determining Educational Needs--An Overview. U.S.O.E., 1969. ERIC, ED 039-631.

Popham, W. James. Educational Needs Assessment in the Cognitive, Affective, and Psychomotor Domain. Center for the Study of Evaluation, U.C.L.A. 1969. 7pp.

Wardrop, J. Towards A Broader Concept of Educational Assessment. ERIC, ED 060-062.

If you are interested in learning more about testing in general and test reliability and validity, the following might be helpful:

Cronbach, L.J. Essentials of psychological testing. Third Edition. New York: Harper and Row, Publishers, 1970.

Hoepfner, Ralph. Selecting Tests To Assess the Needs. Center for the Study of Evaluation, U.C.L.A.

Isaac, S. and Michael, W. F. Handbook in research and evaluation. San Diego: Robert R. Knopp, Publisher, 1971.

If you want to gain more than the elementary skills for calculating descriptive statistics included in this module, you should study references such as these:

Elzey, F.F. A first reader in statistics. Belmont, California: Brooks-Cole Publishing Company, Division of Wadsworth Publishing Company, 1967.

Huff, D. and Geis. How to lie with statistics. New York: Norton College Division, W.W. Norton & Company, Inc., 1954.

Isaac, J. and W.B. Michael. Handbook in Research and Evaluation. San Diego, California: Robert R. Knapp, Publisher, 1971.

Weinberg, G.H. and J.A. Schumaker. Statistics: An Intuitive Approach. Belmont, California: Brooks-Cole Publishing Company, Division of Wadsworth Publishing Company, 1962 (2nd edition).

If you would like more information on questionnaires, try:

Cramer, Stanley. The Opinion Survey as a Research Technique. Research Guidelines For High School Counselors. New York: College Entrance Examination Board, 1966.

1968 Needs Assessment, Sant Clara County Project to Advance Creativity in Education. San Jose: Supplementary Education Center, 1968.
This is a report from an actual assessment, explaining methodology, data analysis, interpretation, and recommendations.

Three examples of questionnaires are:

Educational Needs Assessment. Iowa City: Westinghouse Learning Corporation, 1973.

Mooney Problem Checklist. New York: The Psychological Corporation, 1950.

Priority Counseling Survey. Los Angeles: Educators Assistance Institute, 1972.

Additional follow-up study information is available in:

Hansen, James C. and Edwin L. Herr. The Follow Up Study. Research Guidelines For High School Counselors. New York: College Entrance Examination Board, 1966.

Jacobs, James R. Effective Follow-Up Study Procedures. The Guidance Clinic. October, 1970, 1-3.

If you are interested in learning more about the critical incident technique, check the following articles:

Flanagan, J.C. "The critical incident technique." Psychological Bulletin, 1954, 51, 327-358.

Jung, S. M. "Evaluative uses of unconventional measurement techniques." California Educational Research Journal. 1971, 22, 48-57.

If you would like more information on the card-sort technique (procedures, field tests, etc.) contact:

Youth Development Research Program
American Institutes for Research
P. O. Box 1113
Palo Alto, California 94302

APPENDIX A

INSTRUCTIONS FOR INTERVIEWERS

DEVELOPING GUIDANCE, COUNSELING AND PLACEMENT PROGRAMS

ASSESSING DESIRED OUTCOMES

INSTRUCTIONS FOR INTERVIEWERS

Introduction: Through small group interviews and a card-sorting procedure, we hope to have students describe their personal guidance and counseling needs, and to indicate which of those needs they would like help to resolve. The help would come through guidance, counseling, and other means of personal assistance. The information will be completely anonymous; students will not need to sign their names to anything. They will be asked to choose statements that describe their personal needs in four areas:

1. Academic Learning Needs (How can I learn to learn better?)

2. Educational and Vocational Needs (How can I plan better for my present and future schooling and work?)

3. Interpersonal Needs (How can I get along better with others?)

4. Intrapersonal Needs (How can I improve the way I feel about myself?)

When all the information has been collected, it will be used to assess current guidance, counseling, and psychological programs and services available and will contribute to the design and evaluation of future programs and services. The success of this venture will depend largely upon your efforts.

For the actual Needs Assessment interviews, you should have the following materials with you:

1. Information Forms
2. Decks of cards
3. Additional (replacement) blank cards for each of these decks
4. Pen or pencil

You will interview individuals according to the schedule which you will be given. All individuals will have received an orientation before the actual assessment. Each interviewer should work with six to eight students.

GENERAL PROCEDURE FOR NEEDS ASSESSMENT STUDENT INTERVIEWS

1. Student selects top five needs from one deck. Interviewer records these.
2. Keep the five cards to one side. Retain the remainder of the deck.
3. Student selects the top five wants, rearranging the remainder of the deck if the wants are not the same as the needs. Interviewer records these. Interviewee puts top five wants to one side and reassembles rest of deck.
4. Repeat steps one through three with each of the remaining three decks.
5. From the new "deck" of 20 (or fewer) wants, select the top eight wants. Interviewer records these. Interviewee replaces all cards in proper deck.
6. Fill in open-ended question #4 (second page of interview sheet) if new wants have been added on blank cards that end up in top 20 wants.
7. Have interviewee fill in rest of open ended questions on page 2, then return form to interviewer.
8. Remove and destroy blank cards on which additional needs were written. Replace destroyed blank ~~cards~~ with new blank cards that have been properly numbered on back.
9. Shuffle cards in each deck and put header card on top of each deck.

The following step-by step instructions will help you in conducting the interview.

A. Introduce yourself. Explain the purpose of the assessment, and the fact that students have a real opportunity to have an impact on programs that affect them. Emphasize the importance of their being honest and saying what they feel. Hand each student in your group an information form. Read the statement on the front page as they follow along.

B. Have the students fill in the top of the data collection form. Explain that the assessment is anonymous and no one will know what they say. Walk around and double check their responses to make sure they are answering properly. Collect the Information Forms. Arrange these forms in front of you to correspond to the way in which the group members are seated. Give each person in your group a number, and then lightly write that number on their form so that you will be sure not to get the forms mixed up. Give each student a deck of cards. The students in your group should start on different colored decks. Give the first student the Green deck. To the second, give the Blue; the third, the Orange; and the fourth, the Yellow. Continue this cycle for the other members of your group, always proceeding in the Green-Blue-Orange-Yellow order.

C. Explain the nature of the four decks of cards. Explain to students the procedure for sorting the cards in the deck they are working on into statements which do represent needs for them, and those which don't. Explain that if they have a question they should ask you. Explain that if they have a need in the area dealt with that is not already included, they may write it (them) on the blank card(s) at the back of the deck.

When a question is asked, hesitate to put your ideas in the student's mind. First try to get his understanding of the card's meaning. Then, respond to the accuracy of that statement.

When a student finishes with a deck, hand him the next deck in the Green-Blue-Orange-Yellow color sequence. Also, remember what color deck the last student in your group started with. Continue the Green-Blue-Orange-Yellow cycle for <u>all</u> students you work with during the week. This is done to counterbalance the administration procedures. Because some students work more diligently on the first deck they receive than the last, using this procedure will enable each deck to be presented first an equal number of times.

D. Explain the process of selecting the five most important cards from the pile that represents chosen needs. Respondents may select less than five, but not more. Then explain the process of putting the most important need of the five face up, followed by the second most important, and so on. When the pile is complete, the respondent turns the stack of five cards over and hands them to you so that only the numbers on the back of the cards are showing.

Wait for the students to select their five greatest needs. When they have done this, you record the numbers on the back of the cards in the appropriate spaces under "NEEDS" on the data sheet. The number on the top card will be the number of his first choice need, etc. Make sure the interviewees know you are looking at the card numbers only, not at the statements. This should add to their feeling that the results are treated confidentially.

If a student has written a need on a blank card as one of his five top needs, record the number in the data section. Do not read the need which the student has written. Later, after the interview has ended you will have the student transfer the need statement from the card to the appropriate section of Question #4 on the second page of the data sheet. If a student wrote a need on a card but did not select it as one of his five greatest needs, have him keep that card aside until the end of the interview and then destroy it. When a student writes on a blank card, be sure to prepare a replacement card and insert it in the deck before the deck is reused.

<u>Do not</u> allow the students to record their choices on their own data sheet. Some students may want to do this, but in the interest of accuracy, you should do all the recording.

E. Collect information about respondents' wants. Ask them to imagine that the best possible help is available. Ask them to select from the card statements those with which they would like help. These "wants" choices may be different from the "need" choices. Have respondents select their top five (or less) wants using the process outlined in step D for each deck. This time, however, have respondents keep their top five "wants" cards from each deck after the numbers are recorded.

F. With needs and wants recorded for each of the four areas, have respondents combine their top five wants cards into one deck of 20 cards, and select the top eight wants statements from these. This gives top wants across all categories. Follow the same recording procedure, and return the cards to the respondents.

G. Have the respondents return their wants cards to the appropriate decks, and mix them through the decks. Have them remove cards on which they wrote additional statements, then shuffle the decks thoroughly. Place the header card at the front and blank cards at the end. Collect the reassembled decks and return the data sheet to each respondent.

H. Have the respondents copy the statements they wrote on blank cards in the space under #4. Then have them proceed with questions five through eight on the data collection instrument. Emphasize again the importance of honesty and the need for suggestions and constructive criticism. Have respondents destroy their added written statements (cards) after they have been recorded on the data collection instruments. When everyone is through, collect these forms. Check respondents to be sure they are filling out the forms correctly.

I. Explain again briefly how the information will be used, and how it should benefit respondents. Thank them for their cooperation. Have students return to their regular schedule in the way least disruptive to the school (this should be predetermined).

AFTER THE INTERVIEW. . .

J. Assemble all the information forms and the decks and return them to assessment headquarters. Keep them in a separate file or envelope until you turn them in.

K. Replace any used blank cards at the back of the deck, numbering them correctly (see item D above).

STUDENT ORIENTATION

To the Student

Your high school is engaging in a project to review and improve the guidance and counseling assistance you receive in school. Within the next few days you are going to have an opportunity to say what your guidance and counseling needs are. The information you give will be anonymous; you will not have to sign your name to anything. It is not possible to collect information from all students, so a random sample of ninth through twelfth grade students has been selected. Your name may be in that sample. In addition to information from students, a random sample of school personnel and parents will be used to make sure that guidance and counseling programs in this school are directed toward the most important needs that you, the students, have.

During the next week, think about the types of personal and educational things with which you need help and don't worry about how hard it might be to get that help. Imagine that every possible way of meeting your needs could be made available. Try to be completely honest; don't report what you think others would like to hear. This is a real opportunity for you to have an impact on what happens to you in school.

You will be asked to supply this information on your needs by using a card-sorting procedure. You will be given four decks of cards. On each card a different need will be written. If the cards which you are given do not describe all of your needs, blank cards will be available on which you may write other needs you may have. You also will have a chance to make any general comments you feel are important.

You will work in small groups with an assistant like the person who is handing out this sheet today. Since this information on your needs can have a real impact on the guidance and counseling which is available to you, your thoughtful cooperation is needed.

Your Guidance and Counseling Department

WHY NEEDS ASSESSMENT?

Why should you, as a student, be worried now about the job situation a few years from now, or about planning for your future and making some determinations of your own needs for that future? Consider briefly the following facts:

- 90% of all the scientists who ever lived are alive today.
- Human knowledge is doubling about every 15 years.
- There is more change in the lifespan of one man today than there was in the space of 1,000 years, a few centuries ago.
- The earth's urban population is doubling about every eleven years. There are more than twice as many people living in the cities of the world today as when you were born.
- Half of all the energy consumed by man in the past 2,000 years has been consumed in the last 100.
- By the time today's teenager reaches old age, the society around him will be producing roughly 32 times as much in the way of goods and services as when he was born.

Facts taken from <u>Future Schock</u>
by Alvin Toffler

We live in a world unlike any that has ever existed previously. The pace of change has reached such lightning proportions that it is only through thoughtful assessment of one's own place in the world and intelligent planning for the future that one can adapt and survive.

"The classical pattern of an individual having a schooling phase, a working phase, and a retirement phase is changing fast. A student leaving school is finding that he must resume his studies again and again if he desires to keep up with the increase in scientific and technical knowledge. He must not only renew his knowledge of his own special area; he must be ready to prepare either for a new occupation within the same occupational area, or even for an entirely different occupational field. Since an individual's lifetime will be filled with decision points more than ever before, teaching students to adapt to change is rapidly becoming a primary aim of American education."

Dr. Jack A. Hamilton, Educator
and Research Scientist

So today's student is presented with an unprecedented challenge by the world he is about to enter. Every effort he can make to respond to this challenge, to come to know himself and the world in which he will live more fully, may represent the difference between survival and being left behind and lost by a world hurtling at breakneck pace into the future. The interviews and assessment about to be conducted represent one response: an attempt to determine what you as human beings need now, and this will lead to an attempt to then respond to these needs in such a way that, hopefully, you will be able to deal effectively with the world of tomorrow.

APPENDIX B

Tape-Slide Introduction

DESIRED OUTCOMES ASSESSMENT

VISUAL	AUDIO
1. LONE YOUTH LOOKING AT A NOTICE WHICH READS: BOARD MEETING TONIGHT. OPEN TO PARENTS AND ADULTS.	1. Background hall noise during change of class.
2. SAME YOUTH WATCHING T.V., PUBLIC SERVICE ANNOUNCEMENT.	2. T.V. Announcer's Voice: "...and so if you're over 18, be sure to vote in next Tuesday's election."
3. SAME YOUTH GLANCING IN ROOM WHERE A TEACHERS' MEETING IS GOING ON.	3. Meeting noise. Someone talking about what student's need.
4. SAME YOUTH WALKING HOME, ALONE, HEAD DOWN, AND DEPRESSED.	4. Youth saying to self: "I wish someone would ask me what I want sometime. Don't my opinions count?"
5. TITLE: DESIRED OUTCOMES ASSESSMENT. STAFF DEVELOPMENT PACKAGE.	5. Male Narrator: The main idea behind a desired outcomes assessment is finding out from students what they want.
6. COUNSELOR IN HIS OFFICE WITH A STUDENT SEEKING HELP.	6. If done well, this is a sizeable task. It is also a rewarding one, and one that can produce significant lasting benefits.
7. CARTOON. FIGURE STUDYING, EXPRESSION SERIOUS, IDEAS COMING OUT ALL SIDES OF HIS HEAD.	7. The module for which this slide-tape presentation serves as an introduction is designed to provide you with the knowledge and skills necessary to conduct such assessment.

8.	DIAGRAM OF THE MODEL, AS IT APPEARS ON PAGE 2 OF THE MODULE.	8.	The module begins by showing you the relationship between this module and the overall model for program development of which it is a part. As you can see, this module comes in the initial planning stage, providing information useful for subsequent steps in the model.
9.	CARTOON. FIGURE LOOKING AT AN IMPRESSIVE LIST OF SKILLS ON THE BOARD, POINTING TO SELF, WITH EXPRESSION WHICH SAYS: "WHO, ME?"	9.	Then the module lists all the knowledge and skills you should achieve by working through it.
10.	CARTOON. FIGURE MADLY WORKING AWAY, PAPERS FLYING IN ALL DIRECTIONS	10.	As you work through the module, you will encounter frequent progress checks to show you whether you are absorbing what you're reading.
11.	CARTOON. FIGURE WITH SMUG LOOK, SITTING WITH GROUP OF LIKE CHARACTERS.	11.	Group activities are also included to let you share your knowledge with others, and benefit from theirs.
12.	CARTOON. FIGURE LOOKING AT PAPERS LABELED: SIMULATION EXERCISE, APPLICATION PROCEDURES, POST-TEST.	12.	Exercises at the end of the module will let you practice your skills, apply them to your own situation, and make sure you have learned everything you're supposed to.
13.	CARTOON. FIGURE WITH CONFUSED EXPRESSION, AND "CURRENT STATUS ASSESSMENT," "DESIRED OUTCOMES ASSESSMENT FLOATING AROUND HIS HEAD.	13.	Female Narrator: Perhaps you're wondering exactly what a desired outcomes assessment is.
14.	DIAGRAM: A —NEED→ B; WHERE YOU ARE NOW; WHERE YOU WOULD LIKE TO BE	14.	Need can be defined as the gap between where you are now, Point A on the diagram, and where you would like to be, Point B.
15.	A LIST OF PRIORITIES, NUMBERED, INTENDED TO REPRESENT PRESENT PRIORITIES.	15.	The current status assessment, explained in the previous module of this series, deals with Point A, determining where you are now.

16. STUDENTS IN A DISCUSSION GROUP, LED BY A TEACHER.	16. This module deals with Point B, where you would like to be. This is determined through asking students, and possibly some adult subgroups as well, what students' needs are and what they would like help with if the best possible services were available.
17. CARTOON. FIGURE WITH RULER, MEASURING ON A DESK.	17. Finally, the gap between what the desired outcomes assessment shows and what the current status assessment shows determines in what directions and how far your program should move. How to precisely determine this gap and write program goals and objectives is dealt with in the next module.
18. CARTOON. FIGURE TRYING TO DECIDE WHICH OF SEVERAL PATHS TO TAKE THROUGH A WOODS.	18. A number of approaches have been used in the past to measure student needs and determine program desired outcomes.
19. A PAGE FROM A QUESTIONNAIRE.	19. The most common is the questionnaire, a paper and pencil approach which has students check, rank, rate, or write responses to items.
20. A MAN DROPPING MANY LETTERS IN A MAILBOX.	20. Follow-up studies sample subjects who have left a program and know from their subsequent experience what thelp they would like to have had.
21. A STUDENT SORTING A DECK OF NEEDS CARDS.	21. This module concentrates on the card sort approach, one which actively involves students and adults in the assessment process and provides comprehensive and usefully structured data.
22. CHART. SEVEN STEPS IN THE ASSESSMENT PROCESS (from page 29 in the module).	22. Whatever the approach, the assessment process has certain well defined steps. The seven shown on the chart are the major ones. (Allow time for reading these.)

23. COUNSELOR PRESENTING IDEAS TO AN "ADVISORY GROUP."	23. Male Narrator: The first, planni[ng] and coordinating with the advisor[y] group, lays the groundwork for th[e] rest of the effort.
24. BLACKBOARD WITH FOLLOWING: INTERPERSONAL NEEDS? INTRAPERSONAL NEEDS? ACADEMIC NEEDS? VOCATIONAL NEEDS?	24. Next, the precise focus of the assessment must be determined.
25. AS ABOVE WITH WORDS: FRESHMEN? PARENTS? AGE? SCHOOL? TEACHERS? SENIORS? ADMINISTRATORS?	25. Third, the sample group who will actually reply to the assessment must be defined and selected.
26. THREE COUNSELORS WORKING AT A TABLE, WRITING OR DISCUSSING.	26. The instruments must be written, pilot tested, revised, and field tested to prepare them for use in the assessment.
27. A GROUP OF STUDENTS BEING ORIENTED.	27. Administration includes selecting and training administrators, orienting respondents, writing schedules, and carrying out determined procedures.
28. SHOT OF A COMPUTER.	28. The sixth step involves pulling together and analyzing the data.
29. COVER SHEET FOR A REPORT.	29. Finally, a report is written and distributed to summarize the results and state the desired outcomes for the program as they have been determined.
30. CARTOON. FIGURES SITTING AROUND WIPING THEIR BROWS, EXHAUSTED FROM A STRENUOUS EFFORT.	30. Female Narrator: And once this is done, exactly what have you accomplished? Listen to some answers to this question.
31. PROGRAM ADMINISTRATOR TALKING TO COLLEAGUE, DOOR OR DESK LABEL IN PICTURE TO IDENTIFY HIM, REPORT IN HAND.	31. "This has given us the basis for measuring what we do. A lot of people I'm responsible to like the idea we're starting to build accountability into education."

32.	PROJECT DIRECTOR, LEADING PLANNING SESSION (BLACKBOARD INFORMATION PROVIDING IDENTIFICATION).	32.	"We have concrete, empirical data to work from now. We don't have to plan from vague theories or guesses."
33.	YOUTH FROM FIRST FOUR SLIDES, TALKING TO FRIEND.	33.	"They did it. They asked me what I needed. I feel like I've had a little say in something for a change."
34.	COUNSELOR, COMMENTING IN PLANNING SESSION.	34.	"I find we are working together better as a team, now that we have common and reliable information on which to base our efforts."
35.	ANOTHER COUNSELOR, SAME	35.	"We have begun a process of planning and evaluation which should keep us from stagnating, and help us stay abreast of future changes and needs."
36.	GROUP OF STUDENTS IN A GROUP COUNSELING SESSION, WITH ONE OF ABOVE COUNSELORS.	36.	Female Narrator: As these comments suggest, there are many advantages to conducting a desired outcomes assessment.
37.	INDIVIDUAL COUNSELOR WORKING BY HIMSELF.	37.	The module will require some hard work. It's designed to take from 10 to 15 hours to complete. It may become frustrating at times.
38.	FAIRLY LONG RANGE SHOT OF THE SCHOOL BUILDING.	38.	But it can help to give you important skills useful for making real improvements in your guidance, counseling, and placement program.
39.	YOUTH FROM FIRST FOUR SLIDES, WALKING HOME, CHEERFUL EXPRESSION, HEAD UP.	39.	It is one tool for making education responsive to young people, and structuring programs around their needs.
40.	COVER PAGE FROM THE MODULE.	40.	Male Narrator: At this point you may begin work on the module.

APPENDIX C

PROCEDURAL CHECKLIST

Assessment Process

	RESPONSIBLE PERSON	DEADLINE DATE	COMPLETED
I. Plan and coordinate with the advisory groups.			
A. Obtain approval and support from appropriate groups.			
B. Acceptance and participation of various sub-groups.			
C. Other considerations:			
1. Who will select areas?			
2. Who will define sample?			
3. Who will choose or develop instruments?			
4. Who will be in charge of administration?			
How much help?			
5. Who will analyze the data?			
6. Who needs to be involved at each step and how will communication occur?			
7. Who will coordinate with computer so data will be usable?			
8. Who will maintain a record of the program development?			
II. Identify areas on which the assessment will focus.			
A. What is the central purpose? Comprehensive, or 1 or 2 key areas?	xxxxxxxx	xxxx	xxxx
B. Is assessment for all or only certain sub-groups?	xxxxxxxx	xxxx	xxxx

	RESPONSIBLE PERSON	DEADLINE DATE	COMPLETED
III. Defining and selecting the sample (10-15% of population).			
A. The few who are measured must reflect the will of all.	XXXXXXXX	XXXX	XXXX
B. Random sample--only chance determines who participates.	XXXXXXXX	XXXX	XXXX
C. Stratified sample--balance sample with key factors.	XXXXXXXX	XXXX	XXXX
D. What level of response will be considered adequate?	XXXXXXXX	XXXX	XXXX
IV. Developing the instruments.			
A. What is evaluation of available cards and statements?			
1. Does revision need to be assigned to someone?			
2. What areas are to be included in survey?			
3. What statements need to be added?			
B. Can we pilot test these on an adult or student group?			
C. Who will develop a data collection instrument?			
1. How will responses be recorded?			
2. How will responses be summarized?			
D. How is data to be reported?			
1. Number of times chosen.	XXXXXXXX	XXXX	XXXX
2. Which was chosen most important most often?	XXXXXXXX	XXXX	XXXX
3. Weighted mean.	XXXXXXXX	XXXX	XXXX
4. How should data be grouped? Subpopulations, sex, grade, age?	XXXXXXXX	XXXX	XXXX

	RESPONSIBLE PERSON	DEADLINE DA	COMPLETED
V. Administering the instrument.			
A. Who will do it? Training? Counselors, teachers, aides, substitutes, graduate students, residents?			
B. Schedule: where, when?			
C. Are written directions needed? For students and interviewers?			
D. Preparing students.			
1. Purpose.			
2. What they can gain.			
3. What is expected.			
VI. Summarizing and analyzing data.			
A. Determine best form and method with computer people.			
B. How are open-ended questions to be handled?			
C. Who is going to do the analysis?			
D. How will data be weighted for analysis?			
1. First choices.	XXXXXXXX	XXXX	XXXX
2. Relative percentages.	XXXXXXXX	XXXX	XXXX
3. How will figures be reconciled?	XXXXXXXX	XXXX	XXXX
4. How will weighted mean be utilized?	XXXXXXXX	XXXX	XXXX
5. How will responses of various subgroups be weighted?	XXXXXXXX	XXXX	XXXX
VII. Applying the results to a definition of the desired outcomes.			
A. Consider both highs and lows in decision making process.	XXXXXXXX	XXXX	XXXX
B. Is data to be considered as a whole or divided into subgroups (i.e., grade, age, sex, etc.)?	XXXXXXXX	XXXX	XXXX
C. Who will produce document reviewing process and results?	XXXXXXXX	XXXX	XXXX

APPENDIX D

STAFF TRAINING MODULE DESCRIPTIONS

1. Orientation

   Gives an in-depth approach to understanding what the comprehensive approach to guidance, counseling, and placement is, what its advantages are, how competency-based training is related to using this approach, and how to determine what training is relevant. Requires 15 - 20 hours to complete.

2. Assessing Desired Outcomes

   Presents various methods of planning and conducting a needs assessment as well as ways of summarizing, analyzing, and reporting the data. Requires 15 - 20 hours to complete.

3. Computer Assisted Reporting

   Provides a general knowledge of the process necessary to develop an effective Computer Information System and enables the participant to select the best approach for gathering and analyzing data from all available options, for a district's particular needs. Requires 10 - 12 hours to complete.

4. Current Guidance Program Assessment

   Provides an understanding of why a current guidance program assessment is needed, how the assessment can be conducted, and what use can be made of the data after it is obtained. Requires 10 - 12 hours to complete.

5. Determining Program Goals and Objectives

   Makes use of the current status assessment and desired outcomes assessment reports to produce a complete set of program goals and student performance objectives for a new program. Requires 10 - 12 hours to complete.

6. Alternative Strategies

   Examines strategies which would be appropriate to the goals and objectives of the program being structured, specifies criteria for assessment of alternative strategies presented, and provides evaluation procedures for the selected strategies. Requires 12 - 15 hours to complete.

7. Groups and Group Leadership Skills

Presents an overview of ways school counselors or other educators could use group leadership skills with task groups, guidance groups, and counseling groups to implement a comprehensive career guidance system. The module also facilitates the development of three basic communication skills that are useful in facilitating interpersonal interaction in all group settings. Requries 12 - 15 hours to complete.

8. Planning Paraprofessional Programs

Provides the structure for the participant to plan, implement, and evaluate a paraprofessional school guidance program in his/her own setting. Also presents the history, development, and major issues involved in the utilization of paraprofessionals. Requires 12 - 15 hours to complete.