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**ABSTRACT**

This coordinator's handbook is designed to give necessary information and guidance to the person responsible for coordinating a training course based on one or more units in the Determining Instructional Purposes training package. Although the role of the coordinator resembles the traditional roles of instructor or consultant, it is not identical to either of these. This is because the coordinator, and all training participants, will be working with a set of fairly self-contained and complete training materials. The training units are designed for school decision-makers involved in planning and managing instructional programs, that is, people who need to have basic skills in "purposing" as well as in managing others in the performance of the functions covered in the training. The units can be used either with existing school personnel or with prospective teachers and administrators. The training units cover setting goals, analyzing problems, and deriving objectives.  
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# for: Setting Goals Analyzing Problems Deriving Objectives

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1971

**COORDINATOR'S HANDBOOK**  
**for DETERMINING INSTRUCTIONAL PURPOSES**

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## A. Introduction

This Coordinator's Handbook is designed to give necessary information and guidance to the person responsible for coordinating a training course based upon one or more units in the Determining Instructional Purposes training package.

Although the role of coordinator resembles the traditional roles of instructor or consultant, it is not identical to either of these. This is because the coordinator, and all training participants, will be working with a set of fairly "self-contained" and complete training materials. However, an effective coordinator is an essential part of the training process, in order for the training units to achieve their intended outcomes. For the training course to succeed, it is very important for you to understand, and accept responsibility for, all the functions described in this Handbook.

Unlike most educational courses or workshops, Determining Instructional Purposes is set up so that training participants function on their own a good deal of the time--either individually or in groups. The coordinator's role is more a matter of organizing, guiding, monitoring, and if possible extending the training process, using the available training materials, rather than having to create the instructional input himself.

Typically the coordinator will be an administrator in a school or district that is offering inservice training using the training units, or a professor of education offering the training in the context of a graduate course in educational administration. Being a coordinator is not, therefore, a matter of following a set of prespecified instructions. As coordinator you will frequently use your own judgment, and sometimes act spontaneously in situations which cannot be predicted beforehand.

What are the coordinator's general responsibilities? In some cases, someone else, from an independent agency or the institution for which the coordinator works, may already have made the decisions to use one or more of the Purposing training units, to set up a training course, and to arrange for locations, schedule, and participants, and then have designated a coordinator to conduct the training sessions. In other cases the coordinator may make all these decisions himself. However, from the Far West Laboratory's perspective, there must be one person (the coordinator) who assumes general responsibility for conduct of the training course using the materials provided. If in fact several people share the coordinator role, or if the coordinator wishes to have an assistant, that is his or their decision. Our description of the coordinator role is based on the assumption that one person is responsible for all the functions involved in setting up and conducting the course. If this is not the case, the coordinator role could be modified to suit the situation.

## B. Before Training Begins

1. Select a training unit that is appropriate for the current or prospective job responsibilities of the anticipated training participants. The training units are designed for school decision makers involved in planning and managing instructional programs, that is, people who need themselves to have basic skills in "purposing" as well as to manage others in the performance of the functions covered in training. You can use the training units with either existing school personnel, or prospective school teachers and administrators.
2. If you decide to use more than one of the training units, you should first determine the sequence in which the units will be presented. Although the numbering of the units (1. Setting Goals, 2. Analyzing Problems, and 3. Deriving Objectives) implies a set sequence, a different sequence or starting point may be appropriate, depending on the purposes for which the training is being conducted.
3. Arrange a training course using the selected unit. A unit can be used in the context of a regularly scheduled course, or a special class or workshop.
4. Publicize the course, enlist participants, and plan a course schedule. The training units have been used successfully in three-hour sessions meeting once or twice a week for an extended period, or in full-day workshops for two or three consecutive days. See pages 6-7 for suggestions on alternate scheduling possibilities for the training.
5. You should be thoroughly familiar with the training materials, including all reading assignments, input materials, worksheets, and written feedback, so that participants' questions can be answered. See pages 5-6 for a summary of the organization and content of the training units. This Coordinator's Handbook, for the most part, does not duplicate content covered in each training unit. Therefore you must review the units themselves to find out about the processes covered, the learning objectives, and any other information which all trainees (and, therefore, the coordinator also) need to know.
6. To help you conduct each training session, this Handbook includes a set of checklists listing all the activities that should be covered in the introductory class session and in the session(s) devoted to each training module. You should preview the appropriate checklist(s) before each training session to become familiar with the activities and with the suggested times to devote to various activities. You should know the sequence of activities for each module, so that procedural questions can be answered.

7. Plan a time schedule for each training session, allowing sufficient time for all necessary activities and any optional activities you wish to add. You may base your own time schedules on the suggested times for each training activity presented in the Coordinator's Checklists. If possible, reading should be done as an outside assignment to save class time for group activities.

### C. Conducting Training Sessions

1. Have participants group themselves into teams of three to five members each. For the Setting Goals or Analyzing Problems training unit, each team will be working together throughout the training course, acting as the Instructional Planning Team for a hypothetical school district. Unless some particular grouping appears appropriate for an already-planned, real-life application of what participants will learn during training, it is recommended that the teams be as diverse as possible in terms of age, sex, professional position, years of experience, and ethnic background for the training in Setting Goals or Analyzing Problems. In contrast, while teams will be formed during Modules One-Three for the Deriving Objectives training, it is recommended that participants select and work with different teammates during each module to gain broader experience in achieving group consensus.

2. The only materials required for the course are:

For the coordinator--The Coordinator's Handbook and one copy of the appropriate training unit;

For the training participants--One copy of the appropriate training unit for each participant.

(Note that you will use the same Coordinator's Handbook for any or all three of the training units on Determining Instructional Purposes.)

You can, of course, supplement the training with other materials of your own choosing as desired.

3. In the first session you should cover the introductory points listed in the Coordinator's Checklist for the Introduction. If the session is long enough you can go on to Module One, or it may be begun in the second class session. Note that the Introduction does not include group activities, whereas each training module does.
4. If questions arise, you should make clear to participants that, although all the steps of the process presented in the training unit should be transferable to real-life school situations, their application will not usually be as highly structured as some of the training activities that they will be performing. (E.g., filling out worksheets allows the participants' performance of the process to be organized efficiently for the purpose of the training sessions, but would probably be impractical in certain real-life situations:)

5. At the beginning of each session you should write the schedule on the board. You can preview or explain the sequence of activities, by having the participants glance at the sections of the training notebook that they will be using as you outline the major activities and their purposes.
6. Point out to participants the learning objectives listed for the introduction and each module. These are the objectives which they are to achieve as a result of the training. You may wish to discuss the objectives with the class.
7. Emphasize to the participants the importance of carefully reading their assignments for each session, so that they will gain knowledge and understanding of the skills to be practiced in the team training activities.
8. Before beginning the team activities for a particular module, you may wish to review and discuss the concepts and techniques described in the reading assignments as well as the self-tests that accompany the reading materials.
9. Preview the training instructions with the participants before they begin. Even though the instructions are in all participants' notebooks, you cannot assume that everyone will read them carefully before beginning.
10. At first glance it seems that the training activities require a large amount of reading and writing to be done within a short period of time. Some participants might rush through the activities, but this would obviously conflict with the learning objectives. You might want to intervene in the sessions at thirty- or forty-five minute intervals in order to make sure things are proceeding properly, and to answer any questions.
11. Most of the training activities call for participants to work as members of a team. This should be clarified as they proceed, and they should be encouraged to work together. If necessary, remind participants that although each team member has a blank copy of each worksheet or form in his notebook, in most cases only one copy of each worksheet or form, reflecting the decisions of the entire team, needs to be completed.
12. If time is limited, participants may prefer to divide the labor for particular team activities. For example, if there are several problems for which to summarize information (training unit on Analyzing Problems), each team member could individually work on a separate problem. Remind participants, however, that since the worksheets are supposed to reflect team consensus, other team members should review the work done by each individual before it is considered complete.
13. You should be prepared for different rates of individual and team performance, and remain flexible enough to handle people working on different activities at the same time. This also emphasizes the importance of your knowing the sequence and nature of the training activities for each module.
14. Emphasize to participants that the written feedback is intended as suggested responses, not necessarily ideal or correct ones. The suggested responses express the thinking of the training developers. While they are useful for reviewing and evaluating the training participants' work, the suggested responses are themselves meant to be reviewed, evaluated, and challenged by the participants, if appropriate.

15. Assuming the role of an instructional planner as outlined in the training materials means that one must be critical and analytical in tackling the unit exercises. You can maximize this process by challenging the responses and evaluations of the participants throughout the training course.
16. In order to keep the teams interacting with one another, you should periodically ask each team to inform the others what they are doing, comment on the training activities, and discuss problems they have encountered. This might be especially appropriate during class discussions at the end of each training module.
17. At the end of each training module, summarize the activities that were accomplished, discuss with participants whether these processes would be useful in planning instruction for their school or school district, and raise issues that may be of concern in applying the skills to their own situation. The Discussion Questions will aid you in this process. You may then preview the activities that are scheduled for the next session.
18. The coordinator is responsible for arranging makeup sessions for students who miss one or more sessions. It is desirable to put latecomers in a separate area, since you will have to work separately with them until they catch up with the rest of the class. They should be given time to complete the reading assignments for the sessions they missed, and to scan the training instructions, input materials, and suggested responses. It is not essential that they complete the team activities that they missed.
19. If convenient, you may wish to make copies of the work completed during the team training activities (i.e., worksheets and evaluation forms), so that you and each member of the team will have a complete set for his own use.

#### D. Organization and Content of the Training Units

The three units in the training package on Determining Instructional Purposes are similar, though not identical, in organization and in the types of materials included. Each training unit includes a table of contents, an introduction, and a number of training modules. Each module takes participants through a complete training process focused on an important skill in instructional purposing. The order of materials within each module roughly corresponds to the order in which they are used in the training process. Generally, each module includes:

- 1) A statement of the learning objectives, so that participants can see in advance the knowledge and skills which they should possess after completing that module.
- 2) Reading assignments, through which individual participants obtain knowledge of the important concepts and principles involved.
- 3) Self-tests, so that individuals can test their own knowledge and understanding of what they have read before undertaking team training activities.

- 4) Suggested responses to the self-tests.
- 5) Additional input information, which participants use for particular training tasks (for example, goal cards, information cards, predictions about the future, a taxonomy for classifying educational objectives).
- 6) Worksheets, on which teams record their work as they complete each training activity.
- 7) Feedback, in the form of suggested responses by the developers or evaluations of their work by other teams.

As coordinator you should understand the significance of the colors of different types of materials:

Blue signifies pages on which participants are to make responses. Both the individual self-tests and the worksheets completed by teams to record outcomes of training activities are in blue.

Gold signifies pages providing feedback. Both the developers' suggested responses to the self-tests and to worksheets and the evaluation forms on which teams evaluate each other's work are in gold.

Other colors besides white are used to present simulated input information.

E. Issues for the Coordinator to Consider

1. Alternate Scheduling Possibilities for Training. Since the three training units differ slightly in overall length and organization, the following suggestions for scheduling training are fairly general.

The first issue concerns how closely you want training participants to adhere to the suggested times provided in the Coordinator's Checklists for each training unit. The suggested times represent the minimum times that the developers recommend be devoted to particular steps in training; by this guideline Setting Goals will take 10-12 hours, Analyzing Problems will take 14-16 hours, and Deriving Objectives will take 10 hours for participants to complete. The total time spent in training by any particular group of participants will vary greatly, however, depending on their motivation, level of skill, the extent to which they bring their own experiences into the process, etc. Ideally, you and the participants should decide at the beginning how intensively you wish to cover the training materials, and be willing to condense or extend the allotted training time accordingly.

The second issue concerns how to break the course content down into smaller segments, appropriate for one-to-three-hour training sessions. The training units were designed to make this easy, since you can arrange separate sessions to cover each module (or, if the sessions



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are long enough, two modules per session). Not all modules in a single training unit take equal time to complete, however, see the Coordinator's Checklists for suggested times. For learning purposes it is probably best to complete each module during the same session that it was begun (unless sessions are separated by no more than two days' time).

The third issue concerns whether to schedule the reading (and accompanying self-tests) as part of the class sessions or to make it an outside assignment. Because the times when all participants can meet is often limited and difficult to arrange, and because of differences in participants' reading speeds, it is recommended that the reading assignments and accompanying self-tests for each module be completed outside of class, in advance of the session where that module will be covered.

The fourth issue concerns whether to distribute the training (i.e., hold sessions at least two days or a week apart) or to concentrate it in a two- to three- day workshop. The training units have been, and can be, used in either format. A workshop may best fit your participants' existing schedules, but it runs the risk of not allowing sufficient time for reading, or for assimilating what has been learned before learning more. If the training is provided in the workshop context rather than as a course, you should probably schedule a few extra hours for training sessions, particularly if other activities (dinners, speeches, etc.) intervene.

2. Treating "Purposing" as an Integral Process. You or your training participants may want to deal with the question of how setting goals, analyzing problems, and deriving objectives can be put together in practice to form an integrated process for determining instructional purposes. Because each training unit covers only one part of the process of Determining Instructional Purposes, none of them give major attention to this issue. The following suggestions may be helpful, however.

You may be able to obtain the Orientation to Determining Instructional Purposes, if you have not already done so. This orientation unit includes an audio-visual presentation and a detailed booklet which describes purposing and how the three training units deal with it. If you personally use the orientation unit you will be able to develop your own brief summary of the overall purposing process which you could communicate to training participants. There is also the possibility for arranging to show the presentation or distribute the booklet to training participants. You should contact the Far West Laboratory concerning the orientation unit.

You may find Module Four of the Deriving Objectives training unit helpful in considering how to implement a purposing process in your school or district. (Module Four concerns planning for goal refinement, which is part of the purposing process.)

3. Selecting Potential Training Participants. In some instances, it may be the coordinator's responsibility to determine whether the training is appropriate for particular individuals -- that is, whether their entry level of knowledge and skill is too low or too high to benefit from the

training. The Far West Laboratory is developing diagnostic tests to help users of its products make this decision. Until the tests are available, however, we can only offer these suggestions:

Remember that the training unit covers basic skills, i.e., it does not assume much prior skill or knowledge in setting goals, analyzing problems, or deriving objectives. It does assume some familiarity with the school context, however, and for this reason may be a bit "easier" for inservice participants than for preservice students (though at the same time inservice school personnel may be more critical of the materials for this reason).

As a general rule of thumb, the training is most appropriate for people who have some official responsibility for long-range planning and management of instructional programs (or are in training to assume such responsibility). It is less appropriate for groups with limited or only occasional responsibility in this area (e.g., staff concerned primarily with day-to-day instruction, clerical staff, representatives of community action groups). It is also less appropriate for top school executives, since even though they do have ultimate responsibility for all aspects of school planning and management, in most cases they delegate the actual process of determining instructional purposes to other school staff.

4. Modifying Training Materials or Procedures. As the course progresses, you will very likely make minor adjustments in the training procedures -- for example, spending a little more than the times suggested on activities that the participants find difficult, or combining the review and discussion of two closely related modules. The question may arise, however, as to the possibility of introducing more drastic procedural changes (such as skipping a particular module) or modifying the materials themselves (e.g., rewriting the description of a simulated school district to better approximate conditions familiar to your training participants). We suggest that you consider the following points before introducing any major modifications.

It is true that the training units provide standard materials for all training situations, and include very specific procedures. While the developers encourage coordinators to adhere to the procedures provided, we have very little control over how the units are actually used following release. We do hope that the units provide sufficient flexibility to be adaptable to a variety of user circumstances, since only in this way will they make a substantial contribution to training educational managers.

Accordingly, under certain circumstances major modifications may be appropriate. These circumstances might include: condensing a module in which you are confident your training participants already possess some skill; fitting the training activities into a tight time schedule as required by constraints on participants' time; tying the learning objectives to real-life application as training proceeds. However, you should ask yourself at least two questions:

"If I make this change, will participants still be able to achieve all

the learning objectives?" Since the training units were developed to suit a very large target audience (all U.S. school decision makers), they may suit no one group within that audience to perfection. However, they have been tested and revised based on feedback from a large number of prospective users, and within that framework they have been demonstrated to be effective. (Final reports of field test evaluations are available from the Laboratory upon request.) The Laboratory can offer assurances, therefore, that, if the training units are used according to the procedures specified, the learning objectives will be met by most participants. No such assurances can be given if major modifications are made to the procedures, or to the training materials themselves.

"Will I be able to make the necessary changes in the time available?" The developers put a great deal of time and labor into developing the training units to a point of readiness. Therefore, do not underestimate the time and effort it would take you to make the materials even a little bit better suited to the needs of your training participants. Some changes may be simple, but in our experience, most modifications have been much more difficult and time-consuming than anticipated -- and still have not turned out to satisfy everyone!

5. Monitoring and Guiding Progress. While the participants themselves must be motivated and must work hard to get the most out of this training, as coordinator you share the responsibility for ensuring that participants are in fact learning the objectives as they proceed through the modules. The worksheets and evaluations completed by participants during training should prove very valuable to you for this purpose. If most of the teams seem to be having a similar problem, you may need to revise the training schedule to allow more time for the module(s) involved. You will occasionally need to provide guidance to a particular team if it appears to be falling behind the rest of the class.
6. Evaluating Participants' Performance Following Training. In some instances the coordinator's responsibilities may include evaluating the overall performance of individual participants at the conclusion of training, for purposes of grading or rating them. Since the success of training depends to a great extent on you, and on the materials themselves, it is really more appropriate to try and evaluate the entire training course than to judge individual students. However, if you face this requirement we suggest the following:

It is not recommended that you use the work completed during training to grade or rate individuals, since this is generally group work. Also, participants might be hindered in the process of challenging the materials and making realistic decisions on their own, without the help of the suggested responses, if they knew that their work would be used to evaluate them individually.

What would be most appropriate is to present an additional, culminating assignment to be completed individually after the training is completed. For this assignment participants could be requested to apply the process covered in the training unit(s) to a real-life school situation of their own choosing, and write a paper summarizing the process they went through.

The assignment should not be due immediately after the last training session, but should allow participants time to absorb the entire set of skills covered before they begin and to work on a meaningful, actual situation.

#### F. Information on the Development of the Training Units

You may want to provide the participants some general information on the development of the training unit(s) that they will be using, and the larger program effort to which this training belongs.

The Far West Laboratory for Educational Research and Development in San Francisco, California is a non-profit educational laboratory established by the U.S. Office of Education under the Elementary and Secondary Education Act of 1965 (Title IV, Public Law 89-10). The Laboratory's principal objective is to bring the benefits of educational research into the schools in the most immediate and effective manner. It aims to increase the opportunities of all children to learn by developing educational products for use by students, teachers, or other school-related groups.

Once an educational need has been established, Laboratory staff review the research literature and contact school personnel and other educators for ideas concerning a possible product to meet the need. A prototype product is developed, and then tried out in full-scale field tests by members of the target audience for whom the product is designed. Each product is extensively revised based on the results, and then retested, until it meets certain standards related to performance effectiveness and readiness for release. In many cases a system of interrelated products is developed by each Laboratory program; this is the case for the Educational Management Program, developers of the training unit on Determining Instructional Purposes.

The Educational Management Program's overall goal is to help schools develop an Instructional Program Management System, that will improve school decision makers' ability to perform the three major management functions of purposing, programming, and evaluating instruction.

Purposing involves identification and analysis of existing and anticipated instructional problems and needs, specification and refinement of desired educational outcomes in terms of learner behavior, and specification of performance standards against which actual outcomes can be measured. Programming provides for the transformation of this information into operational school programs by considering alternative methods for achieving desired outcomes with available resources, selecting preferred instructional programs on the basis of comparative benefits and costs, and developing plans for efficient implementation of selected programs or changes to existing programs. Evaluation involves planning for the continuous monitoring of the implemented program, including analysis and evaluation of data concerning its costs and effectiveness in achieving intended outcomes, and revision of programs based on the evaluation.

The Educational Management Program is developing three types of products to help schools improve their management of instructional programs:

1. Training products, which can be used to upgrade individual skills in instructional purposing, program planning, and evaluation planning. The three training units on Determining Instructional Purposes, for example, cover basic-level skills in setting goals, analyzing problems, and deriving objectives. They are supplemented by an orientation unit that provides an overview of the entire purposing process, and by application units to help training participants extend and apply their learning in a real-life job context.
2. Information products, which inform individuals and groups about alternatives which may improve their existing operations for managing instructional programs. Several information units, which describe and help users evaluate alternative means of organizing school personnel to carry out purposing, programming, and evaluation, are being developed.
3. Support tools, which help school decision makers identify and adopt those products or techniques that are most helpful in implementing and maintaining an Instructional Program Management System of their own.

Through use of the appropriate products, schools will improve their own capability to take stock of their current instructional management practices, orient or train their staffs to perform necessary management functions, and implement improved organizational arrangements for carrying out instructional purposing, programming and evaluation.

COORDINATOR'S CHECKLISTS:

SETTING GOALS

This section of the Coordinator's Handbook includes:

- a) A page on which you may write your tentative schedule for the training on Setting Goals;
- b) An overview of the Introduction and each module;
- c) Lists of all the tasks that the coordinator should perform in guiding participants through each session; and
- d) Suggested discussion questions.

While conducting training sessions, you may wish to check off each task as you complete it. Minimum suggested times are indicated for clusters of related tasks. Total times vary depending on whether reading is done outside or in class.

Because many issues may arise during training that cannot easily be answered by referring to the training unit itself, the discussion questions are provided to help you focus on some of these issues and to generate class discussion concerning them. Suggested responses are provided wherever possible. However, since the response to many of these issues depends on the participant's own context and experience, suggested responses are not provided in all cases.

Coordinator's Schedule for Setting Goals Training Course

Date and Time

Preliminaries
Introduction to Setting Goals
Module One: Deriving District Goals
Module Two: Refining Goals into Goal Indicators
Module Three: Screening Sets of Goal Indicators
Module Four: Prioritizing Goal Indicators
Conclusion

Coordinator's Checklist, Introduction

The Introduction orients participants to the process of Setting Goals as it is dealt with in the training unit. It also introduces the simulated Mid City Unified School District, for which participants will be deriving goals and goal indicators during training.

The learning objectives for the Introduction are presented on page 1 of the training unit.

Suggested Times

<p>Conduct discussion of:</p> <ul style="list-style-type: none"> <li>___ 1. How Setting Goals contributes to the overall process of managing instructional programs.</li> <li>___ 2. Nature of materials and procedures in the training unit on Setting Goals.</li> <li>___ 3. Nature of coordinator's role and participant's role in the training process.</li> </ul>	<p align="center">15 minutes</p>
<p>Distribute:</p> <ul style="list-style-type: none"> <li>___ 1. One training unit to each participant.</li> </ul>	<p align="center">5 minutes</p>
<p>Instruct participants to:</p> <ul style="list-style-type: none"> <li>___ 1. Read/review learning objectives for Introduction, p. 1.</li> <li>___ 2. Read/review Introduction to Setting Goals, pp. 1-10.</li> <li>___ 3. Complete/review Self-Test for Introduction, pp. 11-14.</li> <li>___ 4. Read/review Suggested Responses to Self-Test, pp. 15-19.</li> </ul>	<p align="center">Reading: 30 minutes</p> <p align="center">Review: 10 minutes</p>

Coordinator's Checklist, Introduction (continued)

## Suggested Times

<p>Conduct discussion of:</p> <p>___ 1. The simulation: Mid City Unified School District, Instructional Planning Team, pp. 7-10.</p> <p>___ 2. Concepts and principles presented in Introduction.</p> <p>___ 3. Self-Test and Suggested Responses.</p> <p>___ 4. The process of goal setting and goal refinement. (see Discussion Questions).</p>	<p>30 minutes</p>
<p>Preview:</p> <p>___ 1. Module(s) to be covered during next session.</p>	<p>5 minutes</p>

Total Time: 1 hour-  
1 hour, 20 minutes

## Discussion Questions, Introduction

1. In what ways is the goal setting process useful? Can it be useful in itself, or only as a means to an end?

*--Goal setting enables a variety of school-related groups to become directly involved in the instructional planning process. It is also a necessary preliminary step in determining the objectives of instructional and support programs.*

2. How many steps or levels of specificity need to be defined in the goal refinement process?

*--There is no set number of steps. Five steps were suggested in the training unit, but there are a variety of other useful models of instructional planning that suggest more or fewer steps. The number of steps may also vary depending upon the nature of the goal being refined, or on the level of school responsibility at which the goal is established. For some goals, e.g., "the student will acquire basic career-related skills," a large number of refinements may be needed in order to arrive at objectives that are adequate for designing and evaluating instruction. For other goals, e.g., "students will appreciate the learning process," it may not be possible or necessary to break the goal down into many levels. Goals established at the department or program level may need fewer subsequent refinements than goals established district-wide.*

Coordinator's Checklist, Module One

Module One is designed to help participants in:

Deriving District Goals.

It describes the general components of a goal statement, and presents three criteria for deriving district goals. Participants, working with a large number of educational goals, work in teams to derive a list of goals.

The learning objectives for Module One are presented on page 21 of the training unit.

Suggested Times

<p><b>Preliminary activities:</b></p> <ol style="list-style-type: none"> <li>1. Group participants into "Instructional Planning Teams" of three-five members and give each team a name or number for later identification.</li> <li>2. Ask each team to select a team chairman to record the decisions made during team activities.</li> <li>3. If possible, write the schedule of this session's activities on the board.</li> <li>4. Give overview of Module One purposes and activities.</li> </ol>	<p align="center">15 minutes</p>
<p><b>Instruct participants to:</b></p> <ol style="list-style-type: none"> <li>1. Read/review learning objectives for Module One, p: 21.</li> <li>2. Read/review reading assignment for Module One, pp. 21-27.</li> <li>3. Complete/review Self-Test for Module One, pp. 29-30.</li> <li>4. Read/review Suggested Responses to Self-Test, pp. 31-33.</li> </ol>	<p align="center">Reading: 25 minutes</p> <p align="center">Review: 10 minutes</p>

Coordinator's Checklist, Module One (continued)

## Suggested Times

<p>Conduct discussion of:</p> <p>___ 1. Concepts and principles presented in the readings.</p> <p>___ 2. Self-Test and Suggested Responses.</p>	<p>15 minutes</p>
<p>Instruct participants to:</p> <p>___ 1. Read "The MCUSD Goal Setting Effort, Episode One," p. 35 and Instructions for First Team Activity, p. 37.</p> <p>___ 2. Perform First Team Activity.</p> <p>    a. Evaluate MCUSD philosophy statement on Worksheet 1, p. 41.</p> <p>    b. Read Suggested Responses, p. 43.</p> <p>___ 3. Read Instructions for Second Team Activity, p. 45.</p> <p>___ 4. Perform Second Team Activity.</p> <p>    a. Write life areas and code numbers of goal cards on Worksheet 2, p. 47.</p> <p>    b. Read Suggested Responses, pp. 49-53.</p> <p>___ 5. Read Instructions for Third Team Activity, p. 55.</p> <p>___ 6. Perform Third Team Activity.</p> <p>    a. Compile list of goals.</p> <p>    b. Evaluate another team's set of goals on Evaluation Sheet, p. 57 (the coordinator should instruct each team which other team's goals to evaluate).</p> <p>    c. Read evaluation of own team's set of goals.</p>	<p>First Team Activity: 15 minutes</p> <p>Second Team Activity: 30 minutes</p> <p>Third Team Activity: 30 minutes</p>

Coordinator's Checklist, Module One (continued)

## Suggested Times

<p>Conduct discussion of:</p> <p>_____ 1. Team Activities, Suggested Responses, and evaluation.</p> <p>_____ 2. Deriving district goals (see Discussion Questions).</p>	<p>30 minutes</p>
<p>Preview:</p> <p>_____ 1. Module(s) to be covered during next session.</p>	<p>5 minutes</p>

Total Time: 2 hours, 30 minutes-  
2 hours, 45 minutes

## Discussion Questions, Module One

1. What should those involved in setting goals do if there is no official philosophy statement for their school or district?

--This training unit assumes the availability of a statement of educational philosophy to guide the instructional planning team in its goal setting effort. It was not designed to train school people in the process of deriving a district's educational philosophy. If a philosophy statement is not available, however, the planning team could request that top decision makers prepare such a document, or the team itself might take responsibility for preparing one. Then the philosophy statement could be submitted for review before or even along with the goals and goal indicators. If an actual statement cannot be written in time, instructional planners should at least try to discuss what the central purpose or focus of their school district appears to be, and use this as a guide in deriving goals. Early involvement of representatives of various school-related groups in the goal setting process is especially important if the district's educational philosophy still needs to be clearly established.

2. Is it necessary to have a list of major life areas in order to evaluate a set of goals for comprehensiveness?

--To check comprehensiveness it would be helpful to have not just one, but a number of schemes for analysing life into its major aspects. No one scheme will suit all schools in all situations. Whether you explicitly compare your goals to a list of life areas, or just judge the set of goals as to whether it seems to be complete, the important point is to strive for a comprehensive, appropriate set of goals that account for all the major life areas that your students will encounter.

3. How many goals should a goal statement contain?

--This may depend on the focus of the school's or district's educational philosophy and on the particular way in which life areas have been defined. If the goal statement is district-wide and fairly general, the goals will have to be refined through several additional steps and the number of goals should be limited (e.g., under 15) to keep the goal refinement process from becoming unwieldy.

4. Are there other criteria in addition to, or instead of, those presented in this module that you would use to select goals for a goal statement?

Coordinator's Checklist, Module Two

Module Two is designed to help participants in:

Refining Goals into Goal Indicators.

It discusses the common elaborations of goals in goal statements, and presents four criteria for specifying goal indicators for a goal. Participants select a goal and specify goal indicators for it, using real-life goal statements and predictions about the future as additional input.

The learning objectives for Module Two are presented on page 59 of the training unit.

	Suggested Times
Preliminary activities:  _____ 1. If possible, write the schedule of this session's activities on the board.  _____ 2. Give overview of Module Two purposes and activities.	10 minutes
Instruct participants to:  _____ 1. Read/review learning objectives for Module Two, p. 59.  _____ 2. Read/review reading assignment for Module Two, pp. 59-66.  _____ 3. Complete/review Self-Test for Module Two, pp. 67-69.  _____ 4. Read/review Suggested Responses to Self-Test, pp. 71-74.	Reading: 25 minutes  Review: 10 minutes
Conduct discussion of:  _____ 1. Concepts and principles presented in the readings.  _____ 2. Self-Test and Suggested Responses.	15 minutes

Coordinator's Checklist, Module Two (continued)

	Suggested Times
<p>Instruct participants to:</p> <ol style="list-style-type: none"> <li>1. Read "The MCUSD Goal Setting Effort, Episode Two," p. 75 and Instructions for Team Activity, p. 77.</li> <li>2. Perform Team Activity.               <ol style="list-style-type: none"> <li>a. Write goal indicators on Worksheet 3, pp. 101-104.</li> <li>b. Evaluate another team's goal indicators on their Worksheet 3 (the coordinator should instruct each team which other team's goal indicators to evaluate).</li> <li>c. Read evaluation of own team's goal indicators.</li> </ol> </li> </ol>	<p>1 hour, 15 minutes</p>
<p>Conduct discussion of:</p> <ol style="list-style-type: none"> <li>1. Team Activity and evaluation.</li> <li>2. Refining goals into goal indicators (see Discussion Questions).</li> </ol>	<p>30 minutes</p>
<p>Preview:</p> <ol style="list-style-type: none"> <li>1. Module(s) to be covered during next session.</li> </ol>	<p>5 minutes</p>

Total Time: 2 hours, 25 minutes-  
2 hours, 40 minutes

## Discussion Questions, Module Two

1. What are the benefits, if any, of refining goals into goal indicators? Why not go directly from broad goals to curricular objectives?

*--If the community is to be meaningfully involved in the instructional planning process, they need to have a say on more than just the broad, vague goals. For this purpose, goal indicators can be generated by representatives of school-related groups, thus ensuring relevance and responsiveness of school programs. Also, because the broad goals tend to be vague, presenting more refined goal indicators to school-related groups in the community enables them to better interpret and work toward consensus on what achievement of the goals will mean. Having goal indicators as well as goals to work with also gives school personnel clearer direction for subsequent instructional decision making, while at the same time giving them freedom to consider a variety of more specific objectives for achieving these goals.*

2. Should goal indicators be stated to avoid reference to students and student-type behaviors? Doesn't this imply that what's important in life is not important in school and vice versa?

*--In this training unit the emphasis has been on specifying life-related goal indicators, i.e., outcomes that will be important for students to display in the long run. Not all curricular or instructional objectives appear to meet this criterion, either because they are too specific ("will write a three-page report...") or because they are only means to ends ("ability to recite the multiplication table"). If you prefer to mention students and behaviors that students can display in writing your goal indicators, this is all right as long as the behaviors involved will also be called for later in life (e.g., "ability to grasp and solve conceptual problems"). In fact, a related training unit, *Deriving Objectives*, includes goal indicators all of which do refer to students and to outcomes that are important in school as well as in life after students leave school.*

3. How can one write a goal indicator so that it specifies observable behavior?

*--This is a very difficult task. A possible guide is to ask yourself "What are some of the things that the student who achieves this goal will be doing later in life?" At the same time keep a broad perspective so that the outcome specified will refer to all or many students.*

Voting, conducting business transactions, attending social functions, and communicating adequately orally or in writing are examples of observable behaviors. Less observable are goal indicators that use verbs like "demonstrates," "displays," or "exhibits," although these verbs may sometimes be necessary. And "to know" or "to understand" are not observable. Remember finally that this, and the other, criteria for specifying goal indicators are relative rather than absolute, so ask yourself "Is this more observable than that?" rather than "Is this observable?"

4. What is the difference between goal indicators and the elaborations of goals found in most typical goal statements?

--Goal indicators, if written according to the criteria presented, are more explicit than typical elaborations. They break the goal down into discrete elements and emphasize what life outcomes for students are expected to result from the schools' efforts. In contrast, typical elaborations tend to lump together important outcomes, and sometimes describe only what the school as an institution should do, or what students should do while in school. Also, goal indicators tend to refer to more clearly observable behaviors than those implied by typical goal statements.

5. Are there other criteria in addition to, or instead of, those presented in this module that you would use to refine goals into goal indicators?

Coordinator's Checklist, Module Three

Module Three is designed to help participants in:

**Screening Sets of Goal Indicators.**

It describes the process of screening goal indicators to ensure adequate coverage of a goal, and presents three criteria for ensuring adequate coverage. Participants screen all the goal indicators that they wrote during Module Two to determine whether the set of goal indicators adequately covers the goal, and make any necessary changes.

The learning objectives for Module Three are presented on page 105 of the training unit.

**Suggested Times**

<p><b>Preliminary Activities:</b></p> <p>_____ 1. If possible, write the schedule of this session's activities on the board.</p> <p>_____ 2. Give overview of Module Three purposes and activities.</p>	<p align="center">10 minutes</p>
<p><b>Instruct participants to:</b></p> <p>_____ 1. Read/review learning objectives for Module Three, p. 105.</p> <p>_____ 2. Read/review reading assignment for Module Three, pp. 105-108.</p> <p>_____ 3. Complete/review Self-Test for Module Three, pp. 109-111.</p> <p>_____ 4. Read/review Suggested Responses to Self-Test, pp. 113-116.</p>	<p align="center">Reading: 20 minutes</p> <p align="center">Review: 10 minutes</p>
<p><b>Conduct discussion of:</b></p> <p>_____ 1. Concepts and principles presented in the readings.</p> <p>_____ 2. Self-Test and Suggested Responses.</p>	<p align="center">15 minutes</p>

## Coordinator's Checklist, Module Three (continued)

## Suggested Times

<p>Instruct participants to:</p> <p>___ 1. Read "The MCUSD Goal Setting Effort, Episode Three," p. 117 and instructions for Team Activity, p. 119.</p> <p>___ 2. Perform Team Activity.</p> <p>    a. Revise goal indicators on Worksheet 3.</p> <p>    b. Evaluate another team's screened set of goal indicators on Evaluation Sheet, p. 121 (the coordinator should instruct each team which other team's set to evaluate).</p> <p>    c. Read evaluation of own team's screened set of goal indicators.</p>	<p>45 minutes</p>
<p>Conduct discussion of:</p> <p>___ 1. Team Activity and evaluation.</p> <p>___ 2. Screening sets of goal indicators to ensure adequate coverage (see Discussion Questions).</p>	<p>20 minutes</p>
<p>Preview:</p> <p>___ 1. Module(s) to be covered during next session.</p>	<p>5 minutes</p>

Total Time: 1 hour, 45 minutes-  
1 hour, 55 minutes

### Discussion Questions, Module Three

1. How many goal indicators are needed to adequately cover a goal?

*--A goal statement should include at least one goal indicator for every major interpretation of each goal. The broader the goal, and the greater the diversity of viewpoints among school-related groups as to what constitutes a good education, the more goal indicators you will need to adequately cover the goal. On the other hand, you should try to limit the goal indicators to a number that can be feasibly assessed by representatives of school-related groups.*

2. What changes might occur in your own school situation over time that might call for major revision of the goal indicators for a given goal?
3. Are there other criteria in addition to, or instead of, those presented in this module that you would use to screen a set of goal indicators to ensure adequate coverage of a goal?

Coordinator's Checklist, Module Four

Module Four is designed to help participants in:

**Prioritizing Goal Indicators.**

- It presents various methods and sampling techniques for assessing the viewpoints of school-related groups, and suggestions on ways of using the results to prioritize goal indicators. Playing the roles of various school-related groups, participants assess the goal indicators of another team. Participants then use the assessments of their own team's goal indicators to assign priorities.

The learning objectives for Module Four are presented on page 123 of the training unit.

**Suggested Times**

<p><b>Preliminary Activities:</b></p> <p>_____ 1. If possible, write the schedule of this session's activities on the board.</p> <p>_____ 2. Give overview of Module Four purposes and activities.</p>	<p align="center">10 minutes</p>
<p><b>Instruct participants to:</b></p> <p>_____ 1. Read/review learning objectives for Module Four, p. 123.</p> <p>_____ 2. Read/review reading assignment for Module Four, pp. 123-131.</p> <p>_____ 3. Complete/review Self-Test for Module Four, pp. 132-134.</p> <p>_____ 4. Read/review Suggested Responses to Self-Test, pp. 136-137.</p>	<p align="center">Reading: 30 minutes</p> <p align="center">Review: 10 minutes</p>
<p><b>Conduct discussion of:</b></p> <p>_____ 1. Concepts and principles presented in the readings.</p> <p>_____ 2. Self-Test and Suggested Responses.</p>	<p align="center">15 minutes</p>

Coordinator's Checklist, Module Four (continued)

## Suggested Times

<p>Instruct participants to:</p> <ol style="list-style-type: none"> <li>___ 1. Read "The MCUSD Goal Setting Effort, Episode Four," p. 139 and Instructions for First Team Activity, p. 141.</li> <li>___ 2. Perform First Team Activity. <ol style="list-style-type: none"> <li>a. Transfer final set of goal indicators onto Worksheet 4, pp. 143-144.</li> <li>b. Assess goal indicators of another team on its Worksheet 4.</li> </ol> </li> <li>___ 3. Read Instructions for Final Team Activity, p. 145.</li> <li>___ 4. Perform Final Team Activity. <ol style="list-style-type: none"> <li>a. Record ratings and priorities of each goal indicator on Worksheet 5, p. 147.</li> <li>b. Evaluate another team's prioritized goal indicators on Evaluation Sheet, p. 149 (the coordinator should instruct each team which other team's prioritized goal indicators to evaluate).</li> <li>c. Read evaluation of own team's prioritized goal indicators.</li> </ol> </li> </ol>	<p>First Team Activity: 30 minutes</p> <p>Final Team Activity: 45 minutes</p>
<p>Conduct discussion of:</p> <ol style="list-style-type: none"> <li>___ 1. Team Activities and evaluation.</li> <li>___ 2. Prioritizing goal indicators (see Discussion Questions).</li> </ol>	<p>30 minutes</p>
<p>Concluding Remarks</p>	<p>15 minutes</p>

Total Time: 2 hours, 35 minutes-  
2 hours, 55 minutes

### Discussion Questions, Module Four

1. What techniques have been most effective in your own school or district for getting information from school-related groups as to the outcomes that they most want students to achieve?
2. Do you think that citizen participation in school affairs typically does enhance public support for the schools and diminish school-community tensions, as suggested in the reading?

*--If citizen participation is planned, and positive in intent, it undoubtedly improves school-community relations, as well as the education which students receive. It is naive to assume that all citizens can or want to participate, however, or that all who want to participate want to work within or with the existing school structure. The critical issue for school decision makers is to provide for involvement that is meaningful, continuous rather than a rare event, and structured so as to provide useful input for decisions. This training unit attempts to describe one such process for obtaining that kind of involvement.*

3. What would happen if instructional planners did not prioritize the goal indicators that they specify?

*--Although the goal indicators would provide guidance to instructional staff as to the various manifestations of a given goal which students should be helped to achieve, they would not help them to decide where to concentrate their instructional preparations. When teaching staff find that the scope of a given course or program won't allow all aspects of the pertinent goal(s) to be covered, as undoubtedly will happen, decisions about what to leave out may be made arbitrarily or in the interests of the staff rather than the students, unless meaningful priorities have already been set with involvement of major school-related groups.*

COORDINATOR'S CHECKLISTS:

ANALYZING PROBLEMS

This Coordinator's Checklist includes:

- a) A page on which you may write your tentative schedule for the training on Analyzing Problems;
- b) An overview of the Introduction and each module;
- c) Lists of all the tasks that the coordinator should perform in guiding participants through each session; and
- d) Suggested discussion questions.

While conducting training sessions, you may wish to check off each task as you complete it. Minimum suggested times are indicated for clusters of related tasks. Total times vary depending on whether reading is done outside or in class.

Because many issues may arise during training that cannot easily be answered by referring to the training unit itself, the discussion questions are provided to help you focus on some of these issues and to generate class discussion concerning them. Suggested responses are provided wherever possible. However, since the response to many of these issues depends on the participant's own context and experience, suggested responses are not provided in all cases.

Coordinator's Schedule  
for Analyzing Problems Training Course

Date and Time

<b>Preliminaries</b>
<b>Introduction to Analyzing Problems</b>
<b>Module One: Which Problem Signals Warrant Further Analysis?</b>
<b>Module Two: What Problems Do the Signals Imply?</b>
<b>Module Three: What Additional Information is Needed?</b>
<b>Module Four: How Should the Information be Collected?</b>
<b>Module Five: Are the Problems Valid?</b>
<b>Module Six: If They Are Valid, How Serious Are the Problems?</b>
<b>Conclusion</b>

Coordinator's Checklist, Introduction

The Introduction orients participants to the process of Analyzing Problems as it is dealt with in the training unit. It also introduces the simulated Mid City Unified School District, whose problems the participants will be analyzing during training.

The learning objectives for the Introduction are presented on page 1 of the training unit.

	Suggested Times
Conduct discussion of: <ol style="list-style-type: none"> <li>1. How <u>Analyzing Problems</u> contributes to the overall process of managing instructional programs.</li> <li>2. Nature of materials and procedures in the training unit on Analyzing Problems.</li> <li>3. Nature of coordinator's role and participant's role in the training process.</li> </ol>	20 minutes
Distribute: <ol style="list-style-type: none"> <li>1. Distribute: One training unit to each participant.</li> </ol>	5 minutes
Instruct participants to: <ol style="list-style-type: none"> <li>1. Read/review learning objectives for Introduction, p. 1.</li> <li>2. Read/review Introduction to Analyzing Problems, pp. 1-7.</li> <li>3. Complete/review Self-Test for Introduction, pp. 9-11.</li> <li>4. Read/review Suggested Responses to Self-Test, pp. 13-16.</li> </ol>	Reading: 30 minutes  Review: 10 minutes

Suggested Times	
Conduct discussion of:  _____ 1. The simulation: Mid City Unified School District, Instructional Planning Team, pp. 4-7.  _____ 2. Concepts and principles presented in Introduction, pp. 1-3.  _____ 3. Self-Test and Suggested Responses.	20 minutes
Preview:  _____ 1. Module(s) to be covered during next session.	5 minutes

Total Time: 55 minutes-  
1 hour, 15 minutes

Coordinator's Checklist, Module One

Module One is designed to help participants decide:

Which Problem Signals Warrant Further Analysis?

It introduces them to the concept of problem signals, or information received which alerts instructional planners to the existence of problems. Participants: a) learn how to recognize and organize problem signals; b) receive four criteria by which to evaluate whether sets of signals warrant further analysis; and c) work in teams to review simulated problem signals, classify them into categories, and decide which categories require systematic analysis.

The learning objectives for Module One are presented on page 17 of the training unit.

Suggested Times	
<p><b>Preliminary Activities:</b></p> <p>_____ 1. Group participants into "Instructional Planning Teams" of three-five members and give each team a name or number for later identification.</p> <p>_____ 2. Ask each team to select a team chairman to record the decisions made during team activities.</p> <p>_____ 3. If possible, write the schedule of this session's activities on the board.</p> <p>_____ 4. Give overview of Module One purposes and procedures.</p>	<p>15 minutes</p>
<p><b>Instruct participants to:</b></p> <p>_____ 1. Read/review learning objectives for Module One, p. 17.</p> <p>_____ 2. Read/review reading assignment for Module One, pp.17-26.</p> <p>_____ 3. Complete/review Self-Test for Module One, pp.27-31.</p> <p>_____ 4. Read/review Suggested Responses to Self-Test, pp. 33-38.</p>	<p>Reading: 30 minutes</p> <p>Review: 10 minutes</p>

Suggested Times	
<p>Conduct discussion of:</p> <p>_____ 1. Concepts and principles presented in the readings.</p> <p>_____ 2. Self-Test and Suggested Responses.</p>	15 minutes
<p>Instruct participants to:</p> <p>_____ 1. Read September MCUSD News article, p. 39 and Instructions for Team Activity, p. 41.</p> <p>_____ 2. Perform Team Activity.</p> <p style="padding-left: 40px;">a. Read problem signal cards.</p> <p style="padding-left: 40px;">b. Classify and evaluate problem signals on Worksheet 1.</p> <p>_____ 3. Read Suggested Responses, pp. 45-48.</p>	1 hour, 15 minutes
<p>Conduct discussion of:</p> <p>_____ 1. Team Activity and Suggested Responses.</p> <p>_____ 2. Classifying and evaluating problem signals (see Discussion Questions).</p>	20 minutes
<p>Preview:</p> <p>_____ 1. Module(s) to be covered during next session.</p>	5 minutes

Total time: 2 hours, 20 minutes-  
2 hours, 40 minutes

## Discussion Questions, Module One

1. Is it useful to conduct a periodic, cursory screening of all problem signals being received by district staff? If so, how often should this be done?

*--Analyzing problem signals should be an ongoing operation rather than a one-shot affair. This is necessary because of the large quantity of signals that the staff is likely to receive over time. Furthermore, some signals may demand an immediate response (e.g., a complaint from a parent), yet also need to be evaluated in relation to other signals for their possible, long-range significance. The frequency with which all problem signals should be collected, categorized, and screened depends on the number of people available to carry out the screening.*

2. What should be done with signals that you decide do not warrant further analysis at this time?

*--If the signals deserve immediate attention, you could delegate them to the most appropriate person(s) (e.g., building administrators, guidance staff) in the district to deal with them. To determine whether the signals also have long-range or district-wide implications, you might wish to actively collect additional information. Or you might file or record information about the signals on a "hold" basis, so that over time additional signals related to the same problem could be considered along with those initially received.*

3. Is it worthwhile to attempt to record or file information that may be signalling major district problems? How could this be done efficiently?
4. Are there other criteria in addition to, or instead of, those presented in this module that you would use to decide whether particular problem signals warrant analysis?
5. Do you think that enough signals of existing problems are regularly received by staff in your district to make active searching for additional problem signals unnecessary?
6. What do you consider significant sources or methods of communicating problem signals in your community or district?

Coordinator's Checklist, Module Two

Module Two is designed to help participants decide:

**What Problems Do the Signals Imply?**

It describes how to write adequate definitions of the problems implied by the problem signals received. Participants receive four criteria to evaluate the adequacy of problem definitions, and work in teams to write definitions for a number of problems concerning student outcomes.

The learning objectives for Module Two are presented on page 49 of the training unit.

	Suggested Times
Preliminary activities: _____ 1. If possible, write the schedule of this session's activities on the board. _____ 2. Give overview of Module Two purposes and activities.	10 minutes
Instruct participants to: _____ 1. Read/review learning objectives for Module Two, p. 49. _____ 2. Read/review reading assignment for Module Two, pp. 49-56. _____ 3. Complete/review Self-Test for Module Two, pp. 57-62. _____ 4. Read/review Suggested Responses to Self-Test, pp. 63-69.	Reading: 30 minutes  Review: 10 minutes
Conduct discussion of: _____ 1. Concepts and principles presented in the readings. _____ 2. Self-Test and Suggested Responses.	15 minutes

## Suggested Times

<p>Instruct participants to:</p> <ol style="list-style-type: none"> <li>1. Read October MCUSD News Article, p.71 and Instructions for First Team Activity, p. 73.</li> <li>2. Perform First Team Activity.             <ol style="list-style-type: none"> <li>a. Define first two problems on Worksheet 2.</li> <li>b. Read Suggested Responses, pp. 79-81.</li> </ol> </li> <li>3. Perform Second Team Activity.             <ol style="list-style-type: none"> <li>a. Define remaining-three problems on Worksheet 2.</li> <li>b. Read Suggested Responses, pp. 91-93.</li> </ol> </li> </ol>	<p>First Team Activity: 30 minutes</p> <p>Second Team Activity: 30 minutes</p>
<p>Conduct discussion of:</p> <ol style="list-style-type: none"> <li>1. Team Activities and Suggested Responses.</li> <li>2. Defining instructional problems in terms of the student outcomes involved (see Discussion Questions).</li> </ol>	<p>20 minutes</p>
<p>Preview:</p> <ol style="list-style-type: none"> <li>1. Module(s) to be covered during next session.</li> </ol>	<p>5 minutes</p>

Total Time: 2 hours -  
2 hours, 20 minutes

## Discussion Questions, Module Two

1. What difficulties may occur if existing and desired student outcomes are not stated in comparable terms?

*--Discrepancies between the existing and desired states cannot be reliably measured in this case, and it is thus difficult to determine whether or not the problem is valid.*

2. What is wrong with defining problems too broadly?

*--Several different problems may be implied by a broadly-defined problem, some of which may exist among your student population and some which may not; thus the problem will be difficult or impossible to validate. It may also not be feasible to design instructional strategies for solving a number of very comprehensive problems. Furthermore, because of the difficulty in pinpointing the information needed to analyze a broadly stated problem, time and money may subsequently be wasted collecting and examining more information than is necessary.*

3. What is wrong with defining problems too narrowly?

*--Separate analyses of narrowly-defined problems may lead to inefficient, piecemeal solutions; since you may be examining only one symptom of a major problem, the subsequent treatment may not remedy the actual problem. Also, since much of the information gathered may be of a general nature, its applicability to narrowly-defined problems may be difficult to determine.*

4. Why should problem definitions based on signals you've received be considered only tentative?

*--Information initially received may be incomplete, inaccurate, biased, etc., and the nature of the problem may appear in a different light once additional information is collected.*

5. What's wrong with stating student outcome problems in terms of their potential causes?

*--Some conditions that are claimed to be the root causes of certain student outcome problems may not be within the school's immediate power to affect significantly (e.g., poverty). Attempts to improve student learning can become bogged down if those concerned focus on causes, since there is likely to be much disagreement over what is the cause of the problem. By defining the problem in terms of the existing and desired student outcomes school decision makers have a basis for*

*examining a variety of possible contributing factors in terms of their relationship to a single problem--and a better basis for selecting the appropriate solution.*

6. What's wrong with stating student outcome problems in terms of proposed solutions?

*--This tendency prevents school decision makers from examining a range of alternatives that might help solve the problem. It is difficult to determine the merits of proposed solutions if the problem(s) they are meant to solve have not been clearly specified. When problems are defined in terms of recommended solutions, certain causes are automatically assumed, rather than subjecting the problem and its potential causes to the type of rigorous analysis that ensures an appropriate solution.*

Coordinator's Checklist, Module Three

Module Three is designed to help participants decide:

What Additional Information is Needed?

It introduces the concepts of validity and seriousness of problems as a basis for collecting information about them, and presents six criteria that can be used to determine the seriousness of problems. In teams, participants summarize the available information pertinent to the validity and seriousness of each problem, and judge the adequacy of the information for determining validity and seriousness.

The learning objectives for Module Three are presented on page 95 of the training unit.

	Suggested Times
<p>Preliminary activities:</p> <p>___ 1. If possible, write the schedule of this session's activities on the board.</p> <p>___ 2. Give overview of Module Three purposes and activities.</p>	<p>10 minutes</p>
<p>Instruct participants to:</p> <p>___ 1. Read/review learning objectives for Module Three, p: 95.</p> <p>___ 2. Read/review reading assignment for Module Three, pp. 95-104.</p> <p>___ 3. Complete/review Self-Test for Module Three, pp. 105-109.</p> <p>___ 4. Read/review Suggested Responses to Self-Test, pp. 111-117.</p>	<p>Reading: 30 minutes</p> <p>Review: 10 minutes</p>
<p>Conduct discussion of:</p> <p>___ 1. Concepts and principles presented in the readings.</p> <p>___ 2. Self-Test and Suggested Responses.</p>	<p>15 minutes</p>

## Suggested Times

<p>Instruct participants to:</p> <ol style="list-style-type: none"> <li>1. Read November MCUSD News article, p.119 and Instructions for First Team Activity, p.121.</li> <li>2. Perform First Team Activity.               <ol style="list-style-type: none"> <li>a. Read sample information summaries, pp. 123-126.</li> <li>b. Summarize information for remaining three problems on Worksheet 3.</li> <li>c. Read Suggested Responses, pp. 133-138.</li> </ol> </li> <li>3. Read Instructions for Second Team Activity, p.139.</li> <li>4. Perform Second Team Activity.               <ol style="list-style-type: none"> <li>a. Evaluate adequacy of available information concerning each problem on Worksheet 4.</li> <li>b. Read Suggested Responses, pp.143-148.</li> </ol> </li> </ol>	<p>First Team Activity: 60 minutes</p> <p>Second Team Activity: 30 minutes</p>
<p>Conduct discussion of:</p> <ol style="list-style-type: none"> <li>1. Team Activities and Suggested Responses.</li> <li>2. Deciding what additional information is needed to analyze problems (see Discussion Questions).</li> </ol>	<p>20 minutes</p>
<p>Preview:</p> <ol style="list-style-type: none"> <li>1. Module(s) to be covered during next session.</li> </ol>	<p>5 minutes</p>

Total Time: 2 hours, 30 minutes -  
2 hours, 50 minutes

### Discussion Questions, Module, Three

1. How does summarizing in written form information gathered about problems help you in making decisions?

--It organizes the information in terms of the criteria you will use to make decisions about validity and seriousness. It also provides a useful means of communicating the necessary information to others, since not every person who participates in the decision-making process or who inquires about the basis for decisions can read all the available information about a problem.

2. Is there one type of information, that is, one criterion of seriousness, about which you might want to collect and examine information first before proceeding to collect more information about the remaining criteria?

--It may be sensible to examine information about "size of discrepancy" first so that the validity of the problem can be determined--if the problem is invalid, then there is really no need to obtain information about the other criteria that determine seriousness.

3. What are the best guidelines for determining whether you have adequate information to analyze the problem?

--You should have enough information to make a fairly confident judgment as to how serious the problem is with respect to each of the criteria that determine seriousness. However, you do not necessarily need to summarize the same amount of information about each criterion. Since discrepancy between existing and desired state (criterion a.) is used to judge both validity and seriousness, it is very important to have complete information on this criterion. If some of the criteria overlap--e.g., if information on criterion a. has already covered the proportion of students affected--then you will need less information for the subsequent, overlapping criteria (in the above example, criterion b.). If fairly objective information is available on criterion d., financial costs of having the problem (i.e., dollar amounts) or on criterion f., how soon action is required (i.e., dates), just one sentence on each of these criteria may be adequate. Or, if no one has specified a date by which action is required, just indicating "no deadline" or "no date for action has been specified" might be adequate information for judging seriousness. On the other hand, more subjective criteria like c., importance to school-related groups or e., related problems may require a greater amount of information before you can make a confident judgment.

4. Are there other criteria in addition to, or instead of, those presented in this module that you would use to judge the adequacy of available information concerning a problem?

*--Module Four of this training unit suggests that information be collected from a variety of sources and by a wide range of methods to ensure that all pertinent viewpoints are sampled. Thus you might consider the range of sources and methods represented by the problem signals to be a determiner of the adequacy of available information.*

Coordinator's Checklist, Module Four

Module Four is designed to help participants decide:

**How Should the Information be Collected?**

It describes a variety of information sources and methods of collecting information which may be useful in analyzing student outcome problems, and discusses cost-effectiveness as a desirable characteristic of an information collection plan. In teams, participants develop plans to collect additional information about several problems.

The learning objectives for Module Four are presented on page 149 of the training unit.

	Suggested Times
<p>Preliminary activities:</p> <p>___ 1. If possible, write the schedule of this session's activities on the board.</p> <p>___ 2. Give overview of Module Four purposes and activities.</p>	<p>10 minutes</p>
<p>Instruct participants to:</p> <p>___ 1. Read/review learning objectives for Module Four, p. 149.</p> <p>___ 2. Read/review reading assignment for Module Four, pp. 149-160.</p> <p>___ 3. Complete/review Self-Test for Module Four, pp. 161-163.</p> <p>___ 4. Read/review Suggested Responses to Self-Test, pp. 165-168.</p>	<p>Reading: 30 minutes</p> <p>Review: 70 minutes</p>
<p>Conduct discussion of:</p> <p>___ 1. Concepts and principles presented in the readings.</p> <p>___ 2. Self-Test and Suggested Responses.</p>	<p>15 minutes</p>

## Suggested Times

<p>Instruct participants to:</p> <p>_____ 1. Read December MCUSD News article, p.169 and Instructions for First Team Activity, p.171.</p> <p>_____ 2. Perform First Team Activity.</p> <p>    a. Specify information choices for first problem on Worksheet 5.</p> <p>    b. Read Suggested Responses, pp.177-178.</p> <p>_____ 3. Perform Second Team Activity.</p> <p>    a. Specify information choices for remaining two problems on Worksheet 5.</p> <p>    b. Read Suggested Responses, pp. 189-190.</p>	<p>First Team Activity: 30 minutes</p> <p>Second Team Activity: 30 minutes</p>
<p>Conduct discussion of:</p> <p>_____ 1. Team Activities and Suggested Responses.</p> <p>_____ 2. Collecting cost-effective information to analyze problems (see Discussion Questions).</p>	<p>20 minutes</p>
<p>Preview:</p> <p>_____ 1. Module(s) to be covered during next session.</p>	<p>5 minutes</p>

Total Time: 2 hours -  
2 hours, 20 minutes

## Discussion Questions, Module Four

1. What is the first step in developing a cost-effective information plan?

*--Determining what types of information you need--that is, which criteria that determine seriousness of problems you need more information about.*

2. Why should you specify all the sources and methods that you intend to use before you the information collection plan into action?

*--Certain information sources and methods of collecting information may be useful for getting information on more than one criterion of seriousness--e.g., interviewing a sample of students to find out both the proportion of students affected by the problem (criterion b.) and its importance to the school-related group, students (criterion c.). At a still more comprehensive level, if a number of problems are being analyzed at the same time, use of the same sources and/or methods leads to more comparable information across problems as well as greater efficiency in collecting the information. For example, a questionnaire assessing parents' views concerning the importance of basic skills can be extended to cover other areas where problems have been identified, e.g., social skills and physical and emotional well-being.*

3. Do you think that "cost" considerations or "effectiveness" considerations should receive greater weight when you develop an information plan, or should they be weighted equally?

*--Naturally this depends on the resources available, and the consequences of failing to collect the necessary information. Sometimes even with costly and well-thought-out information plans, the information collected may turn out to be of little value because it is too general, biased, inaccurate, etc. Since schools generally have limited resources, they may find it practical to set a ceiling on the cost of collecting the information, and then within these constraints try to ensure that they are collecting the best information available by careful selection of sources and methods. Techniques for combining cost and effectiveness into a single index do exist, but are beyond the scope of this training unit. The point to remember is that you should consider both factors when collecting information rather than either one in isolation.*

4. How can you judge when you have "enough" information to analyze a problem?

*--When you have information that answers each of the six questions, or criteria, that determine seriousness of problems from a variety of sources and collected by a variety of methods.*

5. Say that you have collected a great deal of information about a problem. Is it necessary to process or organize the information in some way before judging the validity and seriousness of the problem?

--Yes, since it would be very difficult to keep all the information in mind in making a decision. There are several useful bases for processing the information. First, since not all the information will be of equal quality, you might first screen it to weed out information that is greatly biased, inaccurate, inappropriate to the problem, etc. Second, as suggested earlier, you should organize the information in terms of the criteria by which you will judge the validity and seriousness of the problem. And finally, you will often need to summarize, or condense, the information, particularly in the case of long reports or open-ended comments. It is important to be aware that in the process of summarizing you are bound to highlight certain aspects, omit others, and perhaps draw inferences or conclusions not directly stated; you should therefore exercise caution in the process.

6. In your experience, have particular sources and/or methods of collecting information proven to be generally more productive or useful than others?

Coordinator's Checklist, Module Five

Module Five is designed to help participants decide:

Are the Problems Valid?

It details the type of information that is needed to determine the validity of problems, and presents four alternative decisions that may be reached about a problem's validity. The importance of redefining problems based on additional information is emphasized. Then, in teams, participants summarize additional information about the problems being analyzed, judge their validity, and where appropriate redefine them based upon the additional information.

The learning objectives for Module Five are presented on page 191 of the training unit.

	Suggested Times
<p>Preliminary activities:</p> <p>— 1. If possible, write the schedule of this session's activities on the board.</p> <p>— 2. Give overview of Module Five purposes and activities.</p>	10 minutes
<p>Instruct participants to:</p> <p><input checked="" type="checkbox"/> 1. Read/review learning objectives for Module Five, p. 191.</p> <p>— 2. Read/review reading assignment for Module Five, pp. 191-195.</p> <p>— 3. Complete/review Self-Test for Module Five, pp. 197-200.</p> <p>— 4. Read/review Suggested Responses to Self-Test, pp. 201-205.</p>	<p>Reading: 20 minutes</p> <p>Review: 10 minutes</p>
<p>Conduct discussion of:</p> <p>— 1. Concepts and principles presented in the readings.</p> <p>— 2. Self-Test and Suggested Responses.</p>	10 minutes

## Suggested Times

<p>Instruct participants to:</p> <p>___ 1. Read February MCUSD News Article, p. 207 and Instructions for First Team Activity, p. 209.</p> <p>___ 2. Perform First Team Activity.</p> <p>    a. Read information cards (the coordinator should remind each team to use <u>only</u> the cards which they specified in their information plans).</p> <p>    b. Summarize additional information for three problems on Worksheet 3.</p> <p>    c. Read Suggested Responses, pp. 211-216.</p> <p>___ 3. Read Instructions for Second Team Activity, p. 217.</p> <p>___ 4. Perform Second Team Activity.</p> <p>    a. Judge validity of problems on Worksheet 6, and redefine problems on Worksheet 2 as necessary.</p> <p>    b. Read Suggested Responses, pp. 233-235.</p>	<p>First Team Activity: 60 minutes</p> <p>Second Team Activity: 30 minutes</p>
<p>Conduct discussion of:</p> <p>___ 1. Team Activities and Suggested Responses.</p> <p>___ 2. Determining the validity of instructional problems (see Discussion Questions).</p>	
<p>Preview:</p> <p>___ 1. Module(s) to be covered during next session.</p>	<p>5 minutes</p>

Total Time:

2 hours, 25 minutes-  
2 hours, 35 minutes

Discussion Questions, Module Five

1. Are problems that you judge to be "valid only in part" the only problems that need to be redefined before judging their seriousness?

*--No, even problems that are judged to be valid as initially defined can generally be more accurately defined after additional information is collected.*

2. Is it possible to receive problem signals about a problem that turns out after analysis not to be valid for your district? Can you give any examples of when this has happened, or might happen?

*--A problem should be judged invalid if the size of the discrepancy between the existing condition and the desired condition is regarded as not significant. Sometimes, of course, the opinions and perceptions of those who initiated problem signals are not shared by the larger school community, in which case the problem might be judged invalid. And sometimes analysis may reveal that the problem is only valid for a single school in the district, and thus is not an appropriate concern for a district-wide planning body.*

3. Suppose you had to judge the validity of a problem as "impossible to determine" because of conflicting information received; how do you deal with the alleged problem thereafter?

*--Such problems should not be ignored, particularly if at least some of the information received indicates that the problem is fairly serious. One approach might be to collect still more information, attempting to get it from the most reliable and objective sources possible; in this way one point of view might emerge as being better supported by the evidence and you could thereby judge whether the problem is or is not valid. Certainly your own opinions and values will influence the ultimate judgment. Another possibility, if two or more parties have strong but conflicting viewpoints and goals concerning the problem, would be to redefine the problem so that the schools can deal with the valid concerns raised by both parties. For example, if critics oppose a proposed sex education program and yet some students and parents are strongly in favor, you might redefine the problem so that it relates to the need for family life and sex information among a subgroup of the students who wish it (i.e., those who will voluntarily enroll in the program), rather than for all students (which implies a mandatory program).*

Coordinator's Checklist, Module Six

Module Six is designed to help participants decide:

If They Are Valid, How Serious Are the Problems?

It details the variety of factors, or criteria, that make certain problems more serious than others. In teams, participants judge the relative seriousness of several problems, by comparing information about each problem pertinent to the criteria that determine seriousness.

The learning objectives for Module Six are presented on page 237 of the training unit.

	Suggested Times
<p>Preliminary activities:</p> <p>___ 1. If possible, write the schedule of this session's activities on the board.</p> <p>___ 2. Give overview of Module Six purposes and activities.</p>	10 minutes
<p>Instruct participants to:</p> <p>___ 1. Read/review learning objectives for Module Six, p. 237.</p> <p>___ 2. Read/review reading assignment for Module Six, pp. 237-240.</p> <p>___ 3. Complete/review Self-Test for Module Six, p. 241.</p> <p>___ 4. Read/review Suggested Responses to Self-Test, pp. 243-244.</p>	Reading: 20 minutes  Review: 10 minutes
<p>Conduct discussion of:</p> <p>___ 1. Concepts and principles presented in the readings.</p> <p>___ 2. Self-Test and Suggested Responses.</p>	10 minutes

## Suggested Times

<p>Instruct participants to:</p> <ol style="list-style-type: none"> <li>1. Read March MCUSD News article, p. 245 and Instructions for Individual Activity, p. 247.</li> <li>2. Perform Individual Activity.       <ol style="list-style-type: none"> <li>a. Judge the seriousness of problems on Worksheet 7.</li> </ol> </li> <li>3. Read Instructions for Team Activity, p. 251.</li> <li>4. Perform Team Activity.       <ol style="list-style-type: none"> <li>a. Judge the seriousness of problems on Worksheet 7.</li> </ol> </li> <li>5. Read Instructions for Final Activity, p. 255.</li> <li>6. Perform Final Activity.       <ol style="list-style-type: none"> <li>a. Write memorandum to Superintendent Redford.</li> </ol> </li> <li>7. Evaluate another team's memorandum.       <ol style="list-style-type: none"> <li>a. Give their own memo to another team that you designate.</li> <li>b. Complete Evaluation Sheet, p. 259.</li> <li>c. Read evaluation of own team's memorandum.</li> </ol> </li> </ol>	<p>Individual Activity: 30 minutes</p> <p>Team Activity: 30 minutes</p> <p>Final Activity: 30 minutes</p>
<p>Conduct discussion of:</p> <ol style="list-style-type: none"> <li>1. Team Activities and evaluation.</li> <li>2. Determining the relative seriousness of instructional problems (see Discussion Questions).</li> <li>3. The entire process of analyzing problems (see Discussion Questions).</li> </ol>	<p>50 minutes</p>

Total Time: 2 hours, 50 minutes-  
3 hours

## Discussion Questions, Module Six

1. Even if problems are systematically analyzed, what factors can account for different priorities for action on problems?

--a) Different information may be collected about the problems; b) Not all the information collected will be equally useful for judging validity and seriousness because its applicability to the problem, objectivity, and/or reliability may vary; c) Different people may judge the relative importance of each of the criteria that determine seriousness of problems somewhat differently.

2. Do you think that certain criteria that determine seriousness of problems are inherently more important than others?

--Not in the sense that all school-related groups or individuals would agree that certain criteria outweigh others. However, a particular individual, given his unique experience and orientation, may attach greater importance to certain criteria when judging seriousness. A school business administrator, for example, might be tempted to give precedence to criterion d., financial costs of having the problem, whereas a parent might think that criterion c., importance to school-related groups, should be weighted most heavily. The important thing for school decision makers is not to take a one-sided approach; for example, do not equate "seriousness" with pressure to take action (criterion f.), as has commonly been done in the past. It is your responsibility to look at all aspects of the problem.

3. Suppose that complaints about a particular problem recently analyzed by your district's planning team are continuing to circulate. As a school decision maker, how would you explain to critics why the schools have not initiated an intensive effort to solve the alleged problem?

--There may be several legitimate reasons for such apparent "no action." First, the analysis might have turned up information indicating that the problem is not valid, i.e., despite problem signals the discrepancy between existing and desired states is not of practical significance. Or the problem, while judged valid, may have been found to be of low seriousness in comparison to other problems requiring attention and therefore intensive effort to solve this problem was judged unfeasible or inappropriate. Finally, even if the problem was judged valid and serious, the planning team and/or other school decision makers may currently be examining the potential causes and attempting to determine the most appropriate solution before rushing prematurely into action. If you took the time to develop and communicate an adequate rationale for the apparent "no action," criticisms might be reduced.

4. Are there other criteria that you would use in addition to, or instead of, those presented in this training unit for judging how serious problems are relative to one another?

### Discussion Questions, Entire Training Unit

1. Should the six steps outlined in this training for analyzing problems, i.e.,
  - 1) which problem signals warrant further analysis?,
  - 2) what problems do the signals imply?,
  - 3) is more information needed?,
  - 4) how can the information be collected?,
  - 5) are the problems valid?, and
  - 6) how serious are they?,
 always be carried out in this sequence?

*--Not necessarily. In some instances the initial problem signals received may provide sufficient information for judging validity and seriousness, and no additional information need be collected. In other cases, you may suspect that a problem is invalid, and may wish to collect only enough information initially to determine its validity. Then, only if the problem is shown to be valid, you could proceed to collect the additional information needed to judge how serious it is.*

2. Are there considerations besides the relative seriousness of problems that determine what action your school or district may take in dealing with valid problems?

*--Yes, probably quite a few. First of all, even when a problem has been shown to require action (i.e., to be serious), various difficulties may arise. When proposed solutions are analyzed in terms of cost and potential impact, it may turn out that there is not enough money to take action, or that the desired state is unrealistically high, or perhaps available staff are not able to solve the problem. (For example, while an environmental education program may be needed, there may not be enough staff to provide it, or the teachers' lack of training may prevent such a program from succeeding and thus it may not be wise to initiate it at this time.) Or a certain area may be considered too controversial for the school to take action, even though there is a recognized student outcome problem in that area: for example, student knowledge, attitudes, and behavior related to sex and family life. Secondly, many of the actions that schools do take to introduce or modify instructional programs are based on factors besides the need to solve serious student outcome problems which may exist in those program areas. An area in which state assistance or federal grants have recently become available may suddenly be judged "high priority" by particular school decision makers. Or a newly-hired school executive may be highly interested in certain program areas (e.g., foreign language) or techniques (e.g., team teaching) and push for higher resource allocations for these purposes even if no serious student outcome problems have been found to be related to these concerns.*

3. Would you ever use a procedure similar to the one presented in this training unit to deal with other types of school concerns besides student outcome problems? Would it or would it not be important to analyze the student outcome problems separately from other types of problems (e.g., staffing problems, financial matters, program weaknesses)?

*--The general process also seems appropriate for analyzing problems related to school concerns other than student outcomes. The criteria for collecting information and for judging seriousness would probably be somewhat different. Because of the pitfalls already discussed in confusing underlying causes, student outcome problems, and actions taken by schools that may or may not help solve such problems, it is probably best to at least specify in advance which of the problems to be analyzed are primarily student outcomes and which are primarily other school concerns. This should help you in examining relationships between different kinds of problems which the school faces, and in setting appropriate priorities for action.*

4. Is the process of problem analysis appropriate only for district-level planning and decision making, or could it be used at the building or department level as well?

*--The same process, in terms of major steps, seems appropriate at the building or department level. However, since each building or department has fewer resources than the district as a whole, as well as other types of pressures on staff time, it may be more difficult to devote the necessary time and money to analyze problems thoroughly at this level. It may also be wasteful for each school to analyze its own problems in isolation from other schools in the district, since they will each have to go through somewhat similar and expensive steps to complete the process, and may never discover that some of the problems have district-wide significance and should be attacked on that basis. In districts where the central office fails to provide leadership in analyzing long-range problems, however, local school staff probably need to devote attention to it themselves since otherwise they may be making decisions in a vacuum.*

5. What are some of the approaches used by school decision makers in your district to specify the causes of student outcome problems?
6. When and how do school decision makers in your district deal with the issue of deciding on the most appropriate solution(s) to problems being analyzed?

COORDINATOR'S CHECKLISTS:

DERIVING OBJECTIVES

This Coordinator's Checklist includes:

- a) A page on which you may write your tentative schedule for the training on Deriving Objectives;
- b) An overview of the Introduction and each module;
- c) Lists of all the tasks that the coordinator should perform in guiding participants through each session; and
- d) Suggested discussion questions.

While conducting training sessions, you may wish to check off each task listed as you complete it. Suggested times are indicated for clusters of related tasks.

Because many issues may arise during training that cannot easily be answered by referring to the training unit itself, the discussion questions are provided to help you focus on some of these issues and to generate class discussion concerning them. Suggested responses are provided. However, since the response to many of these issues depends on the participant's own context and experience, the coordinator should elaborate or modify according to the situation.

Coordinator's Schedule  
for Deriving Objectives Training Course

Date and Time

<b>Preliminaries</b>
<b>Preface and Introduction to Deriving Objectives</b>
<b>Module One: The Goal Refinement Process</b>
<b>Module Two: Screening Objectives</b>
<b>Module Three: Analyzing Sets of Curricular Objectives</b>
<b>Module Four: District Planning for Goal Refinement</b>
<b>Conclusion</b>

Coordinator's Checklist, Preface and Introduction

The Introduction orients participants to a model of the Goal Refinement Process. It provides definitions and examples of each step of the process in order to provide a framework in which Deriving Objectives can be viewed.

Suggested Times

<p>Conduct discussion of:</p> <p>_____ 1. How Deriving Objectives contributes to the overall process of managing instructional programs.</p> <p>_____ 2. Nature of materials and procedures in the training unit on Deriving Objectives.</p> <p>_____ 3. Nature of the coordinator's role and participant's role in the training process.</p>	<p align="center">15 minutes</p>
<p>Distribute:</p> <p>_____ 1. One copy of the training unit to each participant.</p>	<p align="center">10 minutes</p>
<p>Instruct participants to:</p> <p>_____ 1. Read the Preface and Introduction pages and stop at the cover sheet to Module One, "The Goal Refinement Process "</p>	

Total Time: 25 minutes

### Coordinator's Checklist, Module One

Module One introduces participants to the process of refining goals into curricular objectives and acquaints them with its benefits and uses. The Module is divided into two parts:

GRUMP I is an introductory team activity designed to motivate participants to relax, willingly "suspend their disbelief" about simulated exercises, and interact with their teammates.

GRUMP II requires participants to work individually on activities designed to teach them about the benefits and uses of goal refinement.

Self-tests and feedback conclude the module to help participants assess what they have learned and to clear up possible misconceptions about the material.

The learning objectives for Module One are presented on page 1 of the training unit.

#### Materials Needed:

Training Units

Planitian Objective Cards (one deck per team of 3 to 4 students)

#### Suggested Times

	Suggested Times
Preliminary Activities: _____ 1. Group participants into teams of three-five members. _____ 2. Pass out one deck of objective cards to each team and inform participants that these cards will be used in this first activity.	10 minutes

## Suggested Times

<p style="text-align: center;">GRUMP I</p> <p>Instruct participants to:</p> <ol style="list-style-type: none"> <li>1. Read the module's introduction, page 3, and continue reading GRUMP I, pp. 5-14. Ask the participants not to read beyond page 14 at this time.</li> <li>2. Begin to arrange the objective cards when they have finished reading. (As coordinator, you will need to circulate among the teams to see if help is needed for this activity. Usually about thirty minutes are required for reading and card arrangement. It's helpful to announce prior to calling time that they have five minutes to complete the activity.)</li> <li>3. Compare their work with suggested responses (pp. 15-18) as soon as they have finished.</li> </ol>	40 minutes
<p>Conduct Discussion of:</p> <ol style="list-style-type: none"> <li>1. Any disagreement that may have arisen or questions the teams may have. (Collect decks at this time.)</li> </ol>	10 minutes
<p style="text-align: center;">GRUMP II</p> <p>Part I</p> <p>Instruct Participants to:</p> <ol style="list-style-type: none"> <li>1. Read and perform the activities on an individual basis for GRUMP II. Participants should read and fill out worksheets as they appear (pp. 19-37).</li> <li>2. Complete each worksheet before referring to its appropriate feedback. (Allow about one hour for GRUMP II and be available to answer questions.)</li> <li>3. Complete the self test (pp. 39-42) and compare with feedback when finished.</li> </ol>	50 minutes

## Suggested Times

<p>Conduct discussion of:</p> <p>_____ 1. The response forms and the self-test items. Try to resolve disagreements with the feedback and encourage participants to present alternative responses that they feel are as good or better.</p>	<p>20 minutes</p>
<p>Part II - GRUMP II</p> <p>Instruct participants to:</p> <p>_____ 1. Read the material on pp. 45-46 and using the worksheets (pp. 47-49) diagnose the problem(s).</p>	<p>20 minutes</p>
<p>Conduct discussion of:</p> <p>_____ 1. The participants' work with reference to the suggested responses. Also encourage any questions participants may have concerning goal refinement. The discussion questions on the next page may be useful.</p>	<p>15 minutes</p>

Total Time:

2 hours, 45 minutes

## Discussion Questions, Module One

1. Is it necessary to proceed through all five steps of the goal refinement process?

*--The five steps represent only one model for clarifying the intent of instruction. Whether this model is used, or another, is a school district choice. Which steps are taken by a school or district will depend on where they are and how far they wish to go. For example, a school district which has agreed upon goals and goal indicators may decide that sufficient direction to teachers and students is provided by developing curricular objectives. Such a decision might be based on a philosophical position (i.e., specification of instructional objectives is believed to place too many constraints on teachers and students, and the learning process). Or such a decision might be based on a time and resource limitation. The basic issue concerning the goal refinement process resides in the question -- How much guidance or direction is necessary or desirable for the learning process? Finally, the goal refinement process should not be viewed as a one-time affair. Because it is a cyclical process, the results of the process need to be reexamined periodically in light of experience.*

2. Will the goal refinement process vary from subject to subject?

*--Very likely. The process of refining goals into specific objectives is complex. It is possible to oversimplify the problem by assuming that most results of instruction and learning can be quantified. Also, there are many areas of learning for which the important outcomes may not lend themselves to easy specification and evaluation. The means of assessment for many such outcomes are simply not available. Therefore, goal refinement could be viewed as a process which might be applied totally to some instructional areas and only partly to others.*

Coordinator's Checklist, Module Two

Participants work in teams to screen curricular objectives on the basis of three criteria: Guidance, Relevance, and Feasibility. They then refer to Suggested Responses for feedback on this set of materials.

Materials Needed:

Training Units

Module Three Part I (Programmed Text; to be distributed one per student, for out-of-class reading at the conclusion of this module)

The Learning Objectives for Module Two are presented on page 57 on the Training Unit.

Suggested Times

<p>Preliminary activities:</p> <ol style="list-style-type: none"> <li>1. Review purposes and activities of Module One.</li> <li>2. Group participants into teams of three-five members and ask each team to select a recorder.</li> <li>3. Briefly introduce the activity by explaining that participants will be working in teams to analyze ten curricular objectives (time or need permitting) using team response forms to record their decisions. They will then refer to Suggested Responses provided as a guide.</li> </ol>	<p>15 minutes</p>
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## Suggested Times

<p>Instruct participants to:</p> <ol style="list-style-type: none"> <li>1. Study the introduction and guideline materials, and background information (pp. 55-65). Answer any questions that might arise concerning the criteria.</li> <li>2. Read the instructions (pp. 67-68) and begin work on the practice exercise, p. 69. They may refer to the Suggested Response for the practice exercise (p.71) as soon as they finish. Since the instructions and material for this module are fairly complex, you should spend some time ensuring that all participants understand what they are to do.</li> <li>3. Come to a team decision and have the recorder record the decision.</li> <li>4. Turn to the worksheets and begin the activity. The time for this activity will depend on the number of objectives you as coordinator decide can be handled by the participants. Urge teams to proceed as rapidly as possible.</li> <li>5. Refer to the Suggested Responses when they have completed the screening. You may wish to have teams refer to the feedback after having completed five of the objectives, then to proceed with the remainder.</li> <li>6. Individually proceed with the self-test (pp. 93-95) when they have completed the screening activity, and, when finished, compare their work with the Suggested Responses.</li> </ol>	<p>60-90 minutes</p>
<p>Conduct discussion of:</p> <ol style="list-style-type: none"> <li>1. The screening process,</li> <li>2. The self-test concepts.</li> </ol>	<p>20 minutes</p>

## Suggested Times

Instruct participants to:

1. Try to read Part I of Module Three: the Programmed Text, before the next session.

(Homework;  
about 2 hours)

Total Time:

1 hour, 35 minutes -

2 hours, 5 minutes  
(exclusive of home-  
work)

## Discussion Questions, Module Two

### 1. Why is it important to develop skills in screening objectives?

--Regardless of how a list of objectives is obtained, whether written by a school staff or borrowed from another source, the crucial issue is not that of simply having objectives, but whether the objectives are adequate for the intended use. It is likely that when disenchantment occurs over the use of objectives for planning and conducting instructional programs, the reason can be found in the quality and appropriateness of the objectives. Developing skills and recognition of the importance of screening or evaluating the worth of objectives, and communicating the results of screening, are therefore extremely important staff development goals.

### 2. How important are the three criteria of Guidance, Relevancy, and Feasibility in determining adequacy of objectives?

--One can find other sets of criteria for use in screening objectives. The three used in the training unit were selected primarily because they seem appropriate for objectives dealing with instruction. In our view it is essential to use some set of criteria in order to have a basis or "benchmark" against which to judge. Without an agreed-upon set by those who perform the screening, it will be nearly impossible to achieve district consensus concerning the worth of objectives.

Coordinator's Checklist - Module Three

By the time this training session starts all participants should have read Part I of Module Three: The Programmed Text, at home. With the basic knowledge picked up from this manual, participants analyze in teams a set of curricular objectives for an environmental studies program. The set is to be analyzed in terms of the four factors learned in the Programmed Text. Each team is to appoint a recorder who will write their team analysis of the set on his or her response forms. Feedback is provided for each of the four response sheets.

Materials Needed:

Programmed Text (one per student, to have been read at home)

Training Units

The Learning Objectives for Module Three are presented on page 99 of the Training Unit.

Suggested Times

<p><b>Preliminary activities:</b></p> <ol style="list-style-type: none"> <li>___ 1. Review concepts and procedures for Modules One and Two.</li> <li>___ 2. Discuss the concepts found in the summary of the <u>Programmed Text</u> and answer any questions which participants may have concerning the assignment.</li> <li>___ 3. Group participants into teams of three to five.</li> <li>___ 4. Refer participants to the list of Training Objectives on p. 99 of their notebooks. Explain that they should now be able to perform objectives 1 through 3 having read the <u>Programmed Text</u>. During the Terrabella High Simulation they will be working to achieve objectives 4 and 5.</li> <li>___ 5. Have each team appoint a recorder who will complete each response form based on a team discussion.</li> </ol>	<p align="center">20 minutes</p>
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## Suggested Times

<p>Instruct participants to:</p> <ol style="list-style-type: none"> <li>1. Begin reading the Introduction and Terrabella High Simulation (pp. 101-115).</li> <li>2. Begin working on the response forms and allow about 1-1/2 hours for teams to complete the simulation. The coordinator will need to move from team to team to answer questions and urge them on. Team discussions are encouraged, but they should try to reach agreement after a reasonable amount of time.</li> <li>3. Refer to the Suggested Response as soon as they have completed each response form. Strongly urge that they complete the response form <u>before consulting the feedback.</u></li> <li>4. Read the final page on setting priorities (p. 141).</li> </ol>	<p>1 hour, 30 minutes</p>
<p>Conduct discussion of:</p> <ol style="list-style-type: none"> <li>1. The process of screening sets of objectives, concerning such items as: <ol style="list-style-type: none"> <li>a. The importance of screening sets of objectives (i.e., why screening individual objectives for guidance, relevance, and feasibility does not guarantee that, taken together, the objectives will make an adequate set; the usefulness of this process in planning curricular programs; etc.).</li> <li>b. Other factors that may be useful in screening sets of objectives.</li> <li>c. The importance of referring to the types of information presented in the module (goals, reactions from school-related groups, the nature of the subject matter) in analyzing sets of objectives.</li> <li>d. Problems that might occur should sets of objectives be devised without reference to district goals and goal indicators.</li> <li>e. The usefulness of taxonomies.</li> </ol> </li> </ol>	<p>20 minutes</p>

Total Time:

2 hours, 10 minutes

### Discussion Questions, Module Three

1. What are the primary differences between screening sets of objectives and screening single objectives?

--Although screeners of sets of objectives still must also use mutually agreed upon criteria or factors upon which to base decisions, there are important differences in the process and reasons why this is so. First, judging a set of objectives is frequently more difficult because of the amount of information used in each judgment. The difference may be compared to judging the adequacy of a single surgical procedure vs. judging the effect of the entire operation on the patient in terms of his recovery prognosis, limitations on future actions, financial impact, attitudes of patient and relatives toward the results, etc. Second, it is conceivable that a staff may screen hundreds of single objectives and judge them all to be relevant, feasible, and possessing sufficient guidance. However, without viewing them as a set, screeners will not know whether they are appropriate for intended use.

2. Does the process of screening sets of objectives always require the amount of time and effort suggested?

--It is fairly well accepted that decision making of any kind is generally enhanced by taking the time to obtain and review appropriate information: Obviously, how much time is actually spent depends partly on how much is available. Some decisions or judgments are made on intuition or "feel" and this will always be the case. However, for judgments that have potential long-range impact on instruction and learning, decision makers ought to be knowledgeable about what a rigorous process entails and what the implications are for bypassing part of it.

Coordinator's Checklist, Module Four

Module Four acquaints participants with the process of planning for goal refinement on a district-wide level. The module is divided into three parts:

PART I discusses district planning, and introduces a list of planning categories and properties which are designed to focus upon sets of functions necessary for goal refinement planning. It is performed individually.

PART II requires participants to analyze a less than adequate school district planning effort in terms of the planning categories and properties learned in PART I. This activity is to be performed by teams.

PART III focuses upon a school district planning effort which has implemented the goal refinement process. It is to be analyzed in terms of the planning categories and properties mentioned above, and its segments are to be judged exemplary or inadequate. Participants are to work as teams.

A self-test, intermittent feedback, and coordinator-led discussions are used to allow students periodic self-assessment of their progress.

**Materials Needed:**

**Training Units**

The Learning Objectives for Module Four are presented on page 143 of the training unit.

**Suggested Times**

		<b>Suggested Times</b>
<b>Preliminary activities:</b>		
1.	Review purposes and activities of Modules One, Two and Three.	10 minutes

## Suggested Times

<p><u>PART I</u></p> <p>Instruct participants to:</p> <ul style="list-style-type: none"> <li>___ 1. Read the Introduction, Overview of Materials, and letter (pp. 143-148).</li> <li>___ 2. Perform the activity individually on p. 149. (Allow about five minutes), and then wait for a coordinator-led discussion before proceeding.</li> <li>___ 3. Proceed with Part I individually after completing the introductory activity. Complete the checklist on p. 159.</li> <li>___ 4. Compare work with table of properties as a class with the coordinator</li> </ul>	<p>20 minutes</p>
<p>Conduct discussion of:</p> <ul style="list-style-type: none"> <li>___ 1. The participants' responses to Milley Taint's letter. By using one or more examples from participants, start their thinking toward steps a district might take.</li> <li>___ 2. The concepts and categories presented in Part I.</li> </ul>	<p>15 minutes</p>
<p><u>PART II</u></p> <p>Instruct the participants to:</p> <ul style="list-style-type: none"> <li>___ 1. Form into teams of three to five and to select a recorder for team decisions.</li> <li>___ 2. Begin reading Part II (p. 161).</li> <li>___ 3. Read the Instructions and materials (pp. 163-173) and proceed with the analysis of Las Maquinas.</li> <li>___ 4. Use the Table of Planning Categories and Properties at any time they wish.</li> <li>___ 5. Proceed directly through the activity by referring to Suggested Responses only when they appear in the activity.</li> </ul>	<p>45 minutes</p>

## Suggested Times

<p>Conduct discussion of:</p> <p>___ 1. The procedures and concepts present. Discussion aids (Attachment A) may be helpful at this point. If negative feelings arise about the credibility of the material in Part II, assure participants that the next activity will require more attention to detailed discrimination in their analyses.</p>	15 minutes
<p><u>PART III</u></p> <p>Instruct participants to:</p> <p>___ 1. Begin Reading Part III (p. 185) and perform the activity on an individual basis first, then as a team for a group discussion. The recorder should continue to record team decisions.</p> <p>___ 2. <u>Do not</u> proceed to feedback at this time.</p>	45 minutes
<p>Conduct discussion of:</p> <p>___ 1. A step-by-step process of the activity by using the coordinator-led feedback for Part III. Use of the discussion aids (Attachment B) should be helpful.</p>	15 minutes

Total Time:

2 hours, 45 minutes

## Discussion Questions, Module Four

### 1. Who should be involved in a district goal refinement process?

--One might follow a rule of thumb which states that everyone who is affected by the process should be involved in some way. The importance of obtaining consensus of interested groups is directly proportional to the importance the school district places on the process. If the district views the results of the process as having a definite impact on instructional and learning outcomes, then school-related groups (e.g., parents, community, and students) need to be involved. This is not to say that everyone needs to participate directly at each step. Not only can representation be used, but representation at the various steps of the process can vary. For example, at the philosophy, goal, and goal indicator level, parent and community representation may be the heaviest. As the process continues, the professional staff become increasingly responsible for specification. Students, as the primary beneficiaries of the process, should be involved. The extent and nature of student involvement will probably depend on such factors as their age, their readiness to assume such responsibility, and basic assumptions the district staff has concerning the importance of student involvement in evolving learning outcomes. Before beginning a district-wide goal refinement process, careful attention should be given to plans and procedures for involving people appropriately.

### 2. How does a school district initiate a goal refinement process?

--Assuming that the importance and need of the process is recognized, its initiation and implementation steps may be similar to any other district-wide effort. It deserves a well thought out plan in order to help ensure a successful effort. Some of the elements of such a plan would include (1) assigning responsibility for the process, (2) develop a mission profile (i.e., what is to be accomplished, what are the major sequential events, what are the requirements and constraints that must be considered), (3) analyze the tasks that need to be performed and their sequence, (4) establish a time line, (5) determine personnel requirements including needed training, (6) determine material, equipment, and other non-personnel needs, (7) estimate costs, (8) assess readiness of staff and others involved to proceed, (9) secure approval of plan and budget, (10) obtain needed staff and other resources, (11) orient all concerned, (12) initiate process, (13) assess progress, and so on to completion, and (14) evaluate process. Note: A Far West Laboratory training unit entitled Program Implementation Planning provides training on implementation of a project or program.



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John K. Hemphill  
Laboratory Director