Setting goals is not a new thing for schools. Most schools have devoted considerable effort to thinking through the outcomes they hope students will achieve as a result of their school experience. This training unit on setting goals is designed to sharpen school people's skills in deriving and refining instructional goals to reflect the current purposes of their schools. This program has four modules that cover deriving district goals, refining goals into goal indicators, screening sets of goal indicators, and prioritizing goal indicators. It also contains an appendix of suggested guidelines for obtaining community involvement in a goals effort. (Author/IRT)
Setting Goals

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INTRODUCTION TO SETTING GOALS

Overview

This Introduction will orient you to the process of Setting Goals as it is dealt with in the training unit. By the time you complete the Introduction you will be able to:

1. Name and locate five types of desired student outcomes in the appropriate order of generality-specificity.

2. Recognize the inherent characteristics of each type of desired student outcome by matching examples of each type with particular characteristics.

3. Discriminate examples of each type of desired student outcome as to whether they are goals, goal indicators, curricular objectives, or instructional objectives.

I. The Reasons for Setting Goals

Setting goals is not a new thing for schools. Most schools have devoted considerable effort to thinking through the outcomes they hope students will achieve as a result of their school experience. This training unit on Setting Goals is designed to sharpen school people's skills in deriving and refining instructional goals to reflect the current purposes of their schools.

The widespread community involvement which the process of determining instructional purposes requires is in itself an important reason for a systematic goal setting effort. In fact, determining the broad, underlying goals of the schools' instructional programs should probably be the point of greatest community involvement in instructional decision making. However, to keep the goal setting process from becoming merely an end in itself, the goals arrived at must be sufficiently refined or elaborated upon so that they will guide the instructional staff in the subsequent steps of refining goals into instructional objectives and in making instructional program decisions.

Another important reason for more careful goal setting is related to the pressure on schools today to specify the objectives of instruction. There is training available to help school people learn to write objectives, as well as banks or pools of objectives from which they may select those for their own programs. Yet how do teachers and other instructional planners determine whether the objectives specified are worthwhile and appropriate for their students? The training in this unit on Setting Goals is designed to help school people deal with this more basic and possibly more difficult task, the creation of a sound basis for deriving objectives. In this unit a process for carrying out this task is presented which involves formulating a goal statement that reflects the preferences and needs of students, parents, and other school-related groups.
II. The Goal Refinement Process

Goal refinement is a series of steps for determining the desired states or purposes that the instructional program is designed to achieve. Each of the five basic steps of the goal refinement process produces desired states which differ in specificity and/or in whether they emphasize life-related or school-related outcomes. The five types of desired states which are determined at each step are:

- Educational Philosophy
- Goals
- Goal Indicators
- Curricular Objectives
- Instructional Objectives

1. Educational Philosophy

**Definition:** A composite statement based upon beliefs, concepts, and attitudes from which the educational purpose of the district is derived.

**Some Examples:**
- All students must be provided a good program of general education to aid them in becoming effective citizens in a democracy.
- We believe that the schools should foster optimum individual development in various aspects of living: mental, physical, social, or moral.
- The schools exist for the transmission of culture to our youth and also to aid them in developing an improved culture.

As the examples illustrate, the desired states determined at this step of goal refinement are generally conceived and phrased in terms of life-long aims, and are very general.

2. Goals

**Definition:** Goals state, in highly abstract terms, desired and valued competences, states of being, and/or general levels of proficiency to be achieved. Goals are achieved through the accomplishment of objectives within an educational entity, which may, in this case, refer to a high school, elementary, or unified district, or a school building or classroom.

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Some of the definitions and examples of desired states resulting from each step of goal refinement are based on "Educational Goals and Objectives in California," a study prepared by the School Instructional Program Committee for the California School Boards Association, 1969.
SOME EXAMPLES: The school program should help every learner to acquire those skills, knowledges, and attitudes required for independent, autonomous learning.

Education should provide each person with understanding and acceptance of individuals or groups belonging to diverse cultures.

A number of goals generally can be derived from statements of educational philosophy. Goals are usually concerned with life outcomes, but are more specific than are statements of philosophy.

3. GOAL INDICATORS

DEFINITION: GOAL INDICATORS ARE THE LONG-RANGE BEHAVIORS THAT GIVE OBSERVABLE EVIDENCE OF THE ACHIEVEMENT OF A PARTICULAR GOAL.

SOME EXAMPLES: Graduates will have a habit of leisure-time reading that keeps them well informed about current events.

The student will behave with respect toward people of other cultural groups whom he encounters in work or leisure situations.

A well-educated individual will be able to maintain a balanced budget.

Goal indicators are more specific than goals, but are still life-related. Some goal indicators are observable within the school context. They are a useful step between the goals and the next stages of refinement, which deal with two levels of objectives.

OBJECTIVES

DEFINITION: AN OBJECTIVE IS A QUANTIFIABLE AND/OR OBSERVABLE ACHIEVEMENT ACCOMPLISHED UNDER SPECIFIABLE CONDITIONS. OBJECTIVES SHOULD REFLECT THE CRITICAL FACTORS REQUIRED FOR THE ACHIEVEMENT OF A GOAL.

Objectives can be found directed toward meeting goals at many levels. For instance, objectives can be stated for curricular, course, or daily classroom assignments.

However, when initially specifying objectives for your district, it can be helpful to consider objectives primarily at two levels: curricular objectives and instructional objectives.
4. CURRICULAR OBJECTIVES

DEFINITION: COMPETENCES WHICH RESULT FROM STUDENT INVOLVEMENT IN CURRICULA OR PROGRAMS OF STUDY (SUCH AS THE SCIENCE CURRICULUM, DRIVER EDUCATION, ETC.). THEY CONSIST OF THE SKILLS DIRECTLY RELATED TO PARTICULAR DISCIPLINES.

SOME EXAMPLES: Students will be able to read different types of materials, e.g., literature, news articles, scientific articles, business forms, etc. with speed and correct interpretation.

The student will know the major cultural patterns and norms that characterize the peoples of different countries studied in geography.

The student will be able to define, give examples of, and apply economic principles such as credit, debit, interest, profit, etc.

Thus curricular objectives are more specific than goal indicators. They are school-related, with the desired outcomes phrased in terms of measurable behaviors that students are expected to demonstrate within the school context. Thus student achievement may be evaluated. Furthermore, they usually identify the curricular or program area(s) in which the behavior is to be taught and demonstrated.

5. INSTRUCTIONAL OBJECTIVES

DEFINITION: COMPETENCES WHICH DESCRIBE WHAT THE LEARNER IS TO KNOW, BE ABLE TO DO, OR WILL DEMONSTRATE AS A CONSEQUENCE OF INSTRUCTION, THE IMPORTANT CONDITIONS UNDER WHICH HE WILL PERFORM, AND THE LEVEL OF ACCEPTABLE PERFORMANCE. THEY ARE SHORT-TERM, MAY BE MEASURABLE AS A CONSEQUENCE OF SEVERAL DAYS OF INSTRUCTION, AND MAY REPRESENT ACHIEVEMENT TOWARD CURRICULAR OBJECTIVES.

SOME EXAMPLES: Given a daily newspaper the student will be able to analyze three of the front page stories and write a topic outline for these articles within a two-hour period, identifying 90% of the topic sentences and using correct outlining notation.

When presented with a statement regarding a controversial issue (e.g., racial prejudice, etc.) the student will seek out and examine at least two other viewpoints, identify each, compare and contrast, and then state within a specified time his final opinion regarding the issue.

Using a simulated set of data, the student will analyze a set of budget figures, determine the computational errors contained in the figures, and correctly explain the economic principle(s) underlying each error.
Thus instructional objectives are usually very specific, in terms of behavior, conditions and standards, and are testable within the school context.

This chart shows the relationship between the five types of desired states. It illustrates only a "pie slice" of an entire circular diagram of the district's desired states, from philosophy to instructional objectives.

EDUCATIONAL PHILOSOPHY
The Educational Philosophy is located in the center, as a focus, and the other levels of the desired state branch out from it.

GOALS
At the next level outwards are the goals, which might range in number from, perhaps, three to thirty.

GOAL INDICATORS
Emanating from each goal is a number of potential goal indicators. A set of high-priority goal indicators, those that individually and as a set meet certain criteria are shown linking up with:

CURRICULAR OBJECTIVES.

INSTRUCTIONAL OBJECTIVES
Finally, at the outermost level of the circle are instructional objectives related to each curricular objective.

These five types of desired states—educational philosophy, goals, goal indicators, curricular objectives, and instructional objectives—illustrate the goal refinement process. However, the number of steps a district may choose to pursue will vary—sometimes particular steps may be combined, skipped, or broken down into even finer steps, depending on the nature of the goal and the degree of specificity viewed as necessary and desirable by those involved in planning instruction.
A complete goal statement, as defined in this training unit, consists of the first three desired states described above: a statement of educational philosophy, a list of goals, and a set of goal indicators for each goal. In this training unit, emphasis is placed on formulating a district goal statement starting with an educational philosophy as a basis for deriving goals, selecting goals to be included in the district goal statement, then refining the broad goals into "goal indicators," and screening and prioritizing goal indicators for each goal based upon their importance as judged by school-related groups and other criteria. The phase of goal refinement that translates goals and goal indicators into curricular objectives is the focus of the third and final training unit on Determining Instructional Purposes, called Deriving Objectives.

III. The Goal Setting Training Unit

During this training unit you will be involved with other trainees in learning how to formulate a district goal statement. The unit consists of four "modules," each involving individual reading and exercises, team training exercises, and feedback. The modules and the skills covered in each one are described below.

Module One: Deriving District Goals

The broad statements of intended outcome, such as "to be a good citizen," do not change from one era to another. Thus some people might question the need to derive "new" goals especially if they have an existing goal statement or believe that the goals are self-evident. However, a school system is not static, and thus even the most general list of district goals may become outdated as a guide to the school people whose job it is to help achieve those goals. Thus it is important to periodically review goals for the schools or set new ones as part of the district's long-range instructional planning.

A concentrated goal setting effort need not start "from scratch," but can use existing statements of the district's purpose or intentions as a basis for deriving or updating goals. This will ensure goals which are compatible with the district's educational philosophy. School decision makers may find that some goals derived elsewhere also apply to their situation, and that they can select from existing goal statements of other educational institutions in deriving their own goals. Examining existing goal statements, both local and external to the district, helps lead to a comprehensive set of goals, appropriate for the diversity of students to whose life pursuits and social needs the educational system must relate.

Module Two: Refining Goals into Goal Indicators

In the process of deriving goals school people may recognize that most goals are so general that, while they all are worthwhile, they do not in themselves give specific direction to the instructional program. Thus instructional planners will recognize the importance of refining goals once they have been derived. Refining general goals into more observable, "life-related" goal indicators which represent the goal and are stated positively...
helps school people develop more precise guidelines for making instructional planning decisions than would a process of goal setting which stopped with broadly-stated goals.

Module Three: Screening Sets of Goal Indicators

A broadly-stated goal is subject to various interpretations, which school-related groups may not consider equally important. Therefore, before the final goal statement is presented to school-related groups for approval, revision, or rejection, the goal indicators generated to represent each goal should be examined as a set to ensure adequate coverage of the goal. This module recommends screening sets of goal indicators to identify gaps and to eliminate redundancy.

Module Four: Prioritizing Goal Indicators

Schools set goals partly to ensure that the individuals and groups concerned with the educational process are aware of, and approve of, the schools' efforts. School districts which have engaged in the labor of deriving a goal statement have usually found it worthwhile to assess the community's opinion of the goal indicators they have generated. This module suggests approaches for assessing the viewpoints of school-related groups toward specific goal indicators, so that school decision makers can assign priorities to the goal indicators that reflect community opinion.

IV. The Simulation for the Training Unit on Setting Goals

During this training unit, you will be participating in a simulated school district's efforts to learn about goal setting and to derive a set of goals and goal indicators appropriate for the district and community. The Mid City Unified School District (MCUSD) simulation is used to provide a common background so that people from different school settings have a common working base. You will be working with documents of the type typically used by school planners and administrators in the process of setting goals. The purpose of this training unit is to teach some basic skills involved in goal setting which you can practice during the training and then apply to the real-life situations you encounter on your job. The simulation is used mainly as a vehicle for conveying and practicing these skills.

The Instructional Planning Team

For the purpose of the activities in this training unit, each of you is to assume the role of a member of the newly-created Instructional Planning Team (IPT) for the Mid City Unified School District. The IPT is composed of representatives from several school-related groups, including central office personnel, local building administrators, supervising teachers, department chairmen, support personnel and some student and community representatives. Each of you was recommended for appointment to the IPT by Dr. Redford, the District Superintendent. Dr. Redford and the School Board have stated publicly that they have high hopes that the Team will accomplish a comprehensive study and eventual renewal of the instructional program at MCUSD. He has outlined your new duties as follows:
1. To provide leadership for the improvement of the instructional program by engaging members of the instructional staff in long-range planning.

2. To assist the instructional staff in analyzing the existing program, in defining goals and objectives, and in designing new programs and evaluation measures.

3. To provide leadership and initiate programs for maintaining and improving the instructional skills of the staff.

To prepare you for these new duties, Dr. Redford has arranged for a course to be conducted at MCUSD for the IPT, using self-contained training units on various aspects of instructional planning. During this particular training unit, the skills you will be learning and practicing as a member of the MCUSD IPT all concern Setting Goals.

Your team obligations during training will include reading assignments, completion of some written work, and attendance at all meetings that have been scheduled.

Shortly before the IPT's first training session, Dr. Redford met with the Team and discussed his reasons for requesting that you participate in the training on Setting Goals:

"MCUSD has become increasingly concerned with accountability, that is, trying to explain to the taxpayers the reasoning behind particular educational decisions, and to produce evidence that the schools are doing a satisfactory job of turning out educated and responsible students. It seems to me that we must have a specific statement, supported by the community, that will explain what we hope to accomplish in the educational system in Mid City. To satisfy the educational needs of our students, we must establish a specific starting point and clarify the direction MCUSD is headed in. We must derive a set of goals that is pertinent to our community and to the larger society we live in. Please think in terms of how we can give direction and meaning to the school's actions, to the satisfaction of all members of the community."

The Community

- Mid City is located in Bay County, approximately 25 miles from a major city.
- Total population is 95,000. Two junior colleges and a four-year state college are located nearby.
- Much of the tax base to provide services and goods for the city and the school district comes from the property owners. Although there is some industry, including a heavy-equipment production
The Schools of Mid City

- Approximately 19,000 students attend the schools of the district: K-6, 10,200; 7-8, 3,200; and 9-12, 5,500.
- There are 18 elementary schools; five 7-8 grade schools (one middle-school pilot project includes grades 6-8); and three high schools.
- The district's school population has mixed ethnic origins: 61% Caucasian, 29% Black, 6% Mexican-American, 4% Oriental. In three elementary schools over 50% of the population is Black. The high schools' racial balance is essentially similar to the total ethnic population ratio.

The School Staff

- The Administrative Cabinet consists of Superintendent Redford, two assistant superintendents for Business and for Instruction, elementary and secondary curriculum coordinators, and a director of Research and Guidance.
- The Central Office Staff also includes four school psychologists, four school nurses, three speech therapists, and two coordinators of special education programs.
- There are approximately 750 certified teachers in the district.
- All K-6 schools have a full-time principal; the 7-8 grade schools have a principal and a part-time vice principal. Secondary schools have a principal, a vice-principal, deans, counselors, and department chairmen who participate in planning the educational program.
- The Board consists of five elected members, all of whom have at least two years to serve in their present term of office. They have generally supported administration requests for new programs. However, due to the increase in costs and in the numbers of people and community groups resisting tax increases, they are becoming more cost-minded. They want to see a program planning and budgeting system (PPBS) implemented in the district and are prodding district staff to provide information about the cost-effectiveness of programs. During the past two years, several new educational issues have aroused community interest. As a result, special interest groups have formed and community attendance at Board meetings has increased. District staff and Board are aware of community polarization occurring over educational practices.
The teachers' associations have become more active and militant in demands for higher salaries, more benefits, and more voice in decision making about the instructional program. The NEA-affiliated organization has the power but the rival AFT organization is growing. The administration generally supports the teachers' association over matters of instruction but has remained non-committal over salaries and benefits.

The Instructional Program

- Most elementary schools and classes would be considered traditional, with self-contained classrooms, one teacher responsible for all subject matter for students, time block scheduling of 55-minute periods, predominant use of state-adopted texts, ability and achievement grouping practiced in most classes, most learning activities centered around reading materials.

- There are isolated instances of various innovations in elementary programs, including experimentation with team-teaching, regrouping of students into multi-grade units for instruction, programmed learning materials, the use of ITA reading materials, etc. Limited district office help or encouragement is available for innovative efforts.

- The junior high school program is organized around subject area departments and is heavily academically oriented. One exception is the middle school pilot project at Central School where a group of students is assigned to a team of six teachers, there are few set time periods, more interest and skill groupings, more activity-oriented learning, and considerable student involvement in planning.

- The high school program is predominately college preparatory--about 50% (slightly higher than state average) of the students go on to either two- or four-year colleges. There is a moderate selection of electives, and an after-school program of special interest activities. There are some vocational educational offerings, including woodshop, metal shops, auto mechanics, and a variety of business courses in typing, shorthand, office machines and accounting. There is no work-training program.

- Each high school has seven counselors and two guidance clerks employed to assist students with educational plans and with school-related problems.

The District's Financial Status

- Median salaries: elementary teachers, $8,800; secondary teachers, $9,800. The salary schedule is slightly below the state average.

- Typically, the budget is rather tight. The Board does not wish to ask for increased taxes, having seen the lack of voter support for such increases in neighboring districts. However, the Board has agreed to commit $35,000 from undistributed reserves to finance new programs or major revisions of existing programs.
Self-Test for Introduction

This Self-Test is to help you determine whether you understand the types of desired states or purposes discussed in the introductory materials.

Feel free to refer back to the reading as you complete the Self-Test, if you need to. When you have completed all the items, review the suggested responses beginning on page 15.

1. This diagram represents the steps in the goal refinement process. As you move down from one level to the next (A to B, B to C, and so on) desired states or purposes of the instructional program are defined with increasing specificity. The letters A-E refer to the type of student outcome specified at each level. Write in the blanks to the left of the diagram the name for each type of student outcome.

A =

B =

C =

D =

E =
2. Below are eight student outcomes in the area of Basic Skills. Below them are seven characteristics, each of which applies to certain types of student outcomes. For each student outcome, determine all the characteristics which apply to it. Mark their letters in the space before the outcome.

1. He will be able to maintain a balanced budget.

2. Using his own pencil, paper, and eraser, the student will add 15 pairs of three-digit numbers written on the board, in 30 minutes or less with no more than two errors.

3. He will be able to write effectively both personal and business correspondence.

4. Given a list of 100 words from a standard junior high school word list, the student will write a 500-word essay, within a three-hour time period, on a subject of his choice; using correctly at least 20 words from the list, as judged by the teacher.

5. Every person should acquire basic skills which will lead to further attainment and accomplishment.

6. To possess basic communication and problem-solving skills.

7. By completion of the course, the student will be able to explain the difference between mathematical theorems, axioms, and principles.

8. Eighth grade students will be able to accurately sort into piles relevant from irrelevant information when screening a variety of sources (newspapers, magazines) for data concerning possible causes of, or solutions to, the ecology problem.

a. School-related outcome: refers to observable behavior that occurs within the context of the school.
b. Observable behavior: activity that can be specified by being observed.
c. Delimits or implies the curricular area or course for which this outcome is a concern.
d. Stated in highly abstract terms, universal.
e. Life-related outcome: involves attitudes or behaviors that begin developing during school, but do not necessarily manifest themselves until later in life.
f. Measurable behavior: activity that can be precisely evaluated.
g. Specifies conditions and standards, that is, conditions of performance and the level of acceptable performance.
3. Below are eight student outcomes in the area of Vocational Education. Below them are seven characteristics, each of which applies to certain types of student outcome. For each student outcome, determine all the characteristics which apply to it. Mark their letters in the space before the outcome.

1. Will participate in advanced training programs that enhance his opportunity for promotion.

2. Given different types of oral or written messages from hypothetical clients, the student will write a business letter in reply to each which is an appropriate response to each client's concerns.

3. The student will learn to construct functional wooden objects using the proper tools and following rules of safety and proper care in their use.

4. Occupational and Vocational Competence.

5. To possess an awareness of the dignity of work.

6. Given a written plan for a large wooden object of the student's choice, during one class period he will prepare a detailed list of construction material requirements which is judged by his peers to be highly accurate.

7. The student, when presented with a list of vocations and descriptions of different post-high school training or education programs, will correctly match each vocation with the post-high school program required to enter that vocation.

8. Will use appropriate procedures in seeking and interviewing for jobs.

a. School-related outcome: refers to observable behavior that occurs within the context of the school.

b. Observable behavior: activity that can be specified by being observed.

c. Delimits or implies the curricular area or course for which this outcome is a concern.

d. Stated in highly abstract terms, universal.

e. Life-related outcome: involves attitudes or behaviors that begin developing during school, but do not necessarily manifest themselves until later in life.

f. Measurable behavior: activity that can be precisely evaluated.

g. Specifies conditions and standards, that is, conditions of performance and the level of acceptable performance.
4. Below is a list of several statements representing four specific levels of desired student outcomes. Mark each statement according to which level of desired student outcome it represents: goal (G), goal indicator (GI), curricular objective (CO), or instructional objective (IO).

1. Will demonstrate good citizenship by voting in elections which concern him.

2. The student will be able to write a summary of how each system of the body operates.

3. He will maintain physical fitness appropriate to his age.

4. The student will write a term paper discussing the party system as it exists in the United States.

5. Self-Realization and Mental and Physical Health.

6. Competence to contend with the existing society and to cope with future changes in it.

7. The student will label within a one-hour period, on a diagram of the human digestive tract, all the parts that appear on the diagram.

8. The student will write and present to the class a 10-minute campaign speech for a United States Senator whose attitudes and beliefs he supports, to be judged by his classmates as to the clarity of his stance on the issues presented.
Suggested Responses,

Self-Test for Introduction

Please do not refer to the Suggested Responses until you have attempted all the items on the Self-Test.
1. This diagram represents the steps in the goal refinement process. As you move down from one level to the next (A to B, B to C, and so on) desired states or purposes of the instructional program are defined with increasing specificity. The letters A-E refer to the type of student outcome specified at each level. Write in the blanks to the left of the diagram the name for each type of student outcome.

A = Educational Philosophy

B = Goal

C = Goal Indicators

D = Curricular Objectives

E = Instructional Objectives
2. Below are eight student outcomes in the area of Basic Skills. Below them are seven characteristics, each of which applies to certain types of student outcomes. For each student outcome, determine all the characteristics which apply to it. Mark their letters in the space before the outcome.

   b, e
1. He will be able to maintain a balanced budget.

   a, b, c, f, g
2. Using his own pencil, paper, and eraser, the student will add 15 pairs of three-digit numbers written on the board, in 30 minutes or less with no more than two errors.

   b, e
3. He will be able to write effectively both personal and business correspondence.

   a, b, c, f, g
4. Given a list of 100 words from a standard junior high school word list, the student will write a 500-word essay, within a three-hour time period, on a subject of his choice, using correctly at least 20 words from the list, as judged by the teacher.

   d, e
5. Every person should acquire basic skills which will lead to further attainment and accomplishment.

   d, e
6. To possess basic communication and problem-solving skills.

   a, b, c
7. By completion of the course, the student will be able to explain the difference between mathematical theorems, axioms, and principles.

   a, b, c
8. Eighth grade students will be able to accurately sort into piles relevant from irrelevant information when screening a variety of sources (newspapers, magazines) for data concerning possible causes of, or solutions to, the ecology problem.

a. School-related outcome: refers to observable behavior that occurs within the context of the school.

b. Observable behavior: activity that can be specified by being observed.

c. Delimits or implies the curricular area or course for which this outcome is a concern.

d. Stated in highly abstract terms, universal.

e. Life-related outcome: involves attitudes or behaviors that begin developing during school, but do not necessarily manifest themselves until later in life.

f. Measurable behavior: activity that can be precisely evaluated.

g. Specifies conditions and standards, that is, conditions of performance and the level of acceptable performance.

Note: Outcomes 5 and 6 are examples of well-written GOALS, which should possess characteristics d and e; Outcomes 1 and 3 are examples of well-written GOAL INDICATORS, which should possess characteristics b and e; Outcomes 7 and 8 are examples of well-written CURRICULAR OBJECTIVES, which should possess characteristics a, b, and c; and Outcomes 2 and 4 are examples of well-written INSTRUCTIONAL OBJECTIVES, which should possess characteristics a, b, c, f, and g.
3. Below are eight student outcomes in the area of Vocational Education. Below them are seven characteristics, each of which applies to certain types of student outcome. For each student outcome, determine all the characteristics which apply to it. Mark their letters in the space before the outcome.

1. Will participate in advanced training programs that enhance his opportunity for promotion.
   - b, e

2. Given different types of oral or written messages from hypothetical clients, the student will write a business letter in reply to each which is an appropriate response to each client's concerns.
   - a, b, c

3. The student will learn to construct functional wooden objects using the proper tools and following rules of safety and proper care in their use.
   - a, b, c

4. Occupational and Vocational Competence.
   - d, e

5. To possess an awareness of the dignity of work.
   - d

6. Given a written plan for a large wooden object of the student's choice, during one class period he will prepare a detailed list of construction material requirements which is judged by his peers to be highly accurate.
   - a, b, c, f, g

7. The student, when presented with a list of vocations and descriptions of different post-high school training or education programs, will correctly match each vocation with the post-high school program required to enter that vocation.
   - b, e

8. Will use appropriate procedures in seeking and interviewing for jobs.
   - a

- School-related outcome: refers to observable behavior that occurs within the context of the school.
- Observable behavior: activity that can be specified by being observed.
- Delimits or implies the curricular area or course for which this outcome is a concern.
- Stated in highly abstract terms, universal.
- Life-related outcome: involves attitudes or behaviors that develop during school, but do not necessarily manifest themselves until later in life.
- Measurable behavior: activity that can be precisely evaluated.
- Specifies conditions and standards, that is, conditions of performance and the level of acceptable performance.

Note: Outcomes 4 and 5 are examples of well-written GOALS, which should possess characteristics d and e; Outcomes 1 and 8 are examples of well-written GOAL INDICATORS, which should possess characteristics b and e; Outcomes 2 and 3 are examples of well-written CURRICULAR OBJECTIVES, which should possess characteristics a, b, and c; and Outcomes 6 and 7 are examples of well-written INSTRUCTIONAL OBJECTIVES, which should possess characteristics a, b, c, f, and g.
Below is a list of several statements representing four specific levels of desired student outcomes. Mark each statement according to which level of desired student outcome it represents: goal (G), goal indicator (GI), curricular objective (CO), or instructional objective (IO).

GI 1. Will demonstrate good citizenship by voting in elections which concern him.

CO 2. The student will be able to write a summary of how each system of the body operates.

GI 3. He will maintain physical fitness appropriate to his age.

CO 4. The student will write a term paper discussing the party system as it exists in the United States.

G 5. Self-Realization and Mental and Physical Health.

G 6. Competence to contend with the existing society and to cope with future changes in it.

IO 7. The student will label within a one-hour period, on a diagram of the human digestive track, all the parts that appear on the diagram.

IO 8. The student will write and present to the class a 10-minute campaign speech for a United States Senator whose attitudes and beliefs he supports, to be judged by his classmates as to the clarity of his stance on the issues presented.
Module One presents an approach which you may find helpful in deriving the goals for your school district. You will learn the general components of a goal statement. You will be given three criteria for deriving goals to be included in the goal statement. You will also receive a large number of sample educational goals. Then you will derive a list of goals with the other members of your planning team.

By the time you complete Module One you should be able to:

1. Specify criteria for deriving goals for a district goal statement.
2. Discriminate goals or objectives concerning student outcomes from goals or objectives related to other school concerns.
3. Discriminate goals that are and are not compatible with a given educational philosophy.
4. Evaluate sample lists of goals in terms of their comprehensiveness.
5. Derive a goal statement that emphasizes student outcomes, is compatible with a given educational philosophy, and is comprehensive with respect to the major areas of life in which students will be involved.

I. General Characteristics of a Goal Statement

Most goals are stated in highly abstract or universal rather than observable or measurable terms. All the goals taken together constitute a model of the "ideal man." Sometimes the goals may be stated in priority order, to reflect the particular educational philosophy of the school or district to which the goal statement applies. For example, a humanistically oriented school may value goals concerning creativity and self-expression more than goals relating to vocational and intellectual competence, and order them accordingly in its formal statement of goals. More often, however, the implication in goal statements is that all the goals are equally worthwhile, and thus the order in which they are stated has no great significance.

Sometimes a goal statement includes an introduction or statement of the overall philosophy underlying the goals. The following is a good example of the type of statement one usually finds as an introduction to a set of goals:

Underlying the educational processes in democratic societies are the following assumptions:

1. The Individual is important: An individual human being is the basic unit of structure and function in society. The unique capabilities of a society's membership constitute
its survival potential at any given point in time. Thus, the survival of any society through time depends upon the capabilities of its individual members.

2. Participation is necessary: A democratic society requires active and effective participation by each of its individual members. All participation is sanctioned by the characteristic set of values (pluralistic in nature) dominant in the society at a specific point in time.

3. Education helps develop individual potential: A democratic society depends upon formal and informal educational processes to renew continuously its human resource potential and to maintain an enlightened public.1

Such a statement by itself is not a goal statement, since it does not list the major outcomes for students or desired states that the school seeks to achieve. In most goal statements there is an attempt to enumerate a number of goals, relating to various aspects of human behavior or personality, including intellectual functioning, interpersonal relations, job competence, health, morality, etc. Such goals represent areas in which the school attempts to move students from their existing state closer to the desired state by involving them in a variety of educational experiences.

A list of general goals without some elaboration does not provide all the information necessary for a satisfactory goal statement. A goal statement should also include elaborations for each of the goals in order to provide adequate direction to those school people responsible for implementing programs to achieve the goals. Module Two of this training unit discusses goal indicators, a particular kind of elaboration, which help to clarify what is required for the achievement of each goal.

A school's list of goals must meet certain criteria before it can be considered an adequate goal statement. Three important criteria that can be used to evaluate an existing goal statement or to derive a new goal statement are discussed below:

1. THE GOAL STATEMENT SHOULD FOCUS ON STUDENT OUTCOMES.

2. THE GOAL STATEMENT SHOULD BE COMPATIBLE WITH THE DISTRICT'S EDUCATIONAL PHILOSOPHY.

3. THE GOAL STATEMENT SHOULD BE COMPREHENSIVE WITH RESPECT TO MAJOR LIFE AREAS FOR WHICH STUDENTS SHOULD BE PREPARED.

II. Student Outcomes as a Focus of the Goals

School districts perform many important, interrelated activities, not limited solely to instruction. The staff of a district's business office is primarily concerned with budgeting and finance, and is likely to set goals for the instructional program in terms of better facilities, a well-trained staff, more money, etc. Those involved in instructional planning are likely to view finances and school facilities from the perspective of the resources they provide and thus the limitations they impose on, or the opportunities they create for, instructional decisions. The ultimate concern of instructional planners is the student outcomes expected as a result of each student's participation in the instructional program.

Instructional planners should therefore focus primarily on "student outcomes" in the goals they set, rather than on goals for other aspects of the school program. A "student outcome" is any student behavior, attitude, knowledge, skill, or state of being that might result from involvement in any aspect of the school program. Aspects of the school program include particular instructional programs, school regulations, school facilities, presence of teachers and peers, school organizations, and so forth. Student outcomes may be either desirable or undesirable, intended or unintended from the school's point of view.

By emphasizing student outcome in this training unit, we are not implying that every change in school operations needs to be justified in terms of its impact on student outcome. A new grade report form or an expanded teacher training program may directly affect efficiency, teacher morale, or accounting costs, but have no immediate or observable effect on achievement of desirable student outcomes. Efficiency, cost, and staff morale are in themselves legitimate concerns of the school, however, and may have an eventual impact on other aspects of the educational program. But in the basic effort of setting goals for the school's instructional program, desirable outcomes for students should be the predominant concern.

Some examples may help to clarify the distinction between student outcomes and other school concerns. Any given incident that occurs within the school setting may have implications for both.

Suppose the State Board of Education issued a directive requiring that all graduating seniors be able to demonstrate eighth grade reading proficiency before receiving a high school diploma. The goals for student outcome that might be involved include statements such as these:

* Every child should attain intellectual competence, consonant with his abilities.

* All students should leave school with the skills and knowledge which will allow them to function and compete successfully in life.
The goals for other aspects of the school program for which these demands have implications might include:

- Our district should ensure that appropriate standards for graduation have been formulated and communicated to our students and constituency.
- The instructional program must provide a rich variety of elective course offerings to supplement the core of basic requirements students must meet.

III. Compatibility of Goals with the District's Educational Philosophy

In his book, *Basic Principles of Curriculum and Instruction*, Ralph Tyler discussed "the use of philosophy in selecting objectives." He appeared to be using the term "objectives" in the generic sense, including goals rather than limiting objectives to the curricular and instructional levels. Therefore in the quote below, the term "goals" has been substituted wherever. Tyler said "objectives." In this way, Tyler's comments are pertinent to our discussion of the second criterion for a good goal statement, which is that the goals be compatible with the district's educational philosophy.

To select a group of a few highly important, consistent goals it is necessary to screen the heterogenous collection of goals thus far obtained so as to eliminate the unimportant and the contradictory ones. The educational and social philosophy to which the school is committed can serve as the first screen. The original list of goals can be culled by identifying those that stand high in terms of values stated or implied in the school's philosophy.

Let me illustrate the way in which an educational and social philosophy can actually operate as a screen for selecting and eliminating educational goals. An adequate formulation of an educational and social philosophy will include the answers to several important questions. In essence the statement of philosophy attempts to define the nature of a good life and a good society. One section of an educational philosophy would outline the values that are deemed essential to a satisfying and effective life. Quite commonly, educational philosophies in a democratic society are likely to emphasize strongly democratic values. For example, one such statement of philosophy emphasizes four democratic values as important to effective and satisfying personal and social life. These four values

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are (1) recognition of the importance of every individual human being as a human being regardless of his race, national, social, or economic status; (2) opportunity for wide participation in all phases of activities in the social groups in the society; (3) encouragement of variability rather than demanding a single type of personality; (4) faith in intelligence as a method of dealing with important problems rather than depending upon the authority of an autocratic or aristocratic group.

When a school accepts these values as basic, the implication is that these are values to be aimed at in the educational program of the school. They suggest educational goals in the sense that they suggest the kinds of behavior patterns, that is, the types of values and ideals, the habits and practices which will be aimed at in the school program. Goals that are consistent with these values will be included in the school's educational program.

A good starting point for a district's goal setting effort, then, is to examine existing statements of the school district's central purpose or philosophy. Such a statement is generally representative of the educational community the schools are supposed to serve, and reflects the values of that community. Goals derived should be compatible with the district's philosophy statement as it exists unless (a) there is no previous philosophy or goal statement on record, or (b) the existing philosophy is not representative of the educational community served by the schools. If the philosophy statement appears vague, incomplete, biased, or obsolete, instructional planners may be tempted to either ignore it and just begin writing goals, or write a new statement of philosophy from scratch before proceeding to derive goals. Instead, those responsible for setting goals should attempt to formulate the schools' philosophy more thoroughly and explicitly, but should relate their efforts to what has gone before.

Does educational philosophy really differ from one school district to another? Since values and philosophy are somewhat intangible, it is often difficult to pinpoint the differences. And since statements of philosophy are frequently phrased in very glowing, general terms, few goals would be incompatible with them. On the other hand, the relative emphasis placed on such values as equality, freedom, individualism, productive citizenship, patriotism, morality, self-realization, relevance to social change, etc., in philosophy statements can differ considerably from one district to another, and that difference should be reflected in the goals selected.

The framework presented in "A Study of School Priorities," by Dennis Gooler and Robert W. Stake suggests a means by which a school district could determine which of three general purposes should be emphasized in its own educational philosophy. Three descriptions are presented in a questionnaire.

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3This work was done at the Center for Instructional Research and Curriculum Evaluation (CIRCE), University of Illinois, Urbana.
and respondents are asked to rate each description as to their view of its importance as a purpose or task which the schools should undertake. This breakdown—the human purpose of education, the knowledge purpose of education, and the career purpose of education—is one way in which a school or district's educational philosophy could be analyzed.

THE HUMAN PURPOSE OF EDUCATION

The main responsibility of the schools should be to examine what man is—his history, his values, his work and play, his arts and his sciences, what he has accomplished and what he has failed to accomplish. The school should give students the opportunity to be a participant in the human experience, the aesthetic and emotional experiences as well as the intellectual experience.

THE KNOWLEDGE PURPOSE OF EDUCATION

The main responsibility of the schools should be to help young men and young women know all about the world. Each student should have maximum opportunity to understand nature, technology, commerce, the languages, the fine arts and practical arts. Facing the knowledge explosion, the schools should help young men and women build skills for understanding—and even discovering—new knowledge.

THE CAREER PURPOSE OF EDUCATION

The main responsibility of the schools should be to prepare young people for their life-work. Though most careers require training on the job and continuing education throughout life, the school should lay the foundation for successful work. For students who will take further training in a technical or professional area, the schools should emphasize entrance requirements and preparatory skills.

IV. Comprehensiveness of the Goals

Included in Goal Statement

When a group of instructional planners sets goals for a school district, they need some way of deciding when they have "enough." Generally, the number of goals set to guide the instructional program throughout the district may range from three to thirty—a goal statement should not include too many goals because they will subsequently be refined several times (into goal indicators, curricular objectives, instructional objectives, etc.) and the goal refinement process would become unnecessarily unwieldy. But the best way to decide if enough goals have been included is to determine whether the list of goals is comprehensive, that is, whether the list includes all the major areas of life functioning with which the school needs to be concerned in educating students.
In his book on curriculum and instruction, Ralph Tyler suggested a scheme for analyzing life into six major aspects, each of which includes the child's relevant practices, knowledge and ideas, attitudes, interests, and the like: (a) health, (b) immediate social relationships, including life in the family and with friends and acquaintances, (c) socio-civic relationships, including the civic life of the school and the community, (d) the consumer aspects of life, (e) occupational life, and (f) recreational. Instructional planners may find it helpful to keep in mind such a breakdown of major life areas in determining the comprehensiveness of the list of goals they derive.

School people responsible for setting goals may also find that some goals written for other educational institutions are equally applicable to their own schools. They may be able to derive a more comprehensive set of goals by examining existing goal statements from outside the district from which they can select goals for inclusion in their own goal statement. However, in attempting to be comprehensive they should not include several goals which are essentially the same, and therefore redundant. A careful selection of goals will provide a comprehensive list that covers all the areas of behavior that are considered important to the schools, but will eliminate similar goals relating to any one life area.

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4Ralph W. Tyler op. cit., p. 9.
Module One Self-Test

This self test will help you to assess your understanding of the criteria presented in Module One for deriving district goals. Suggested responses can be found on pages 1-33.

1. Various goals and objectives are listed below. Some are stated in terms of student outcomes of a school program, and some are stated in terms of school concerns other than student outcome. Decide whether each goal or objective concerns a student outcome or not, and check the appropriate line next to each.

<table>
<thead>
<tr>
<th>Student Outcome</th>
<th>Other School Concern</th>
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<tr>
<td>a. Students ought to participate in decisions concerning their own instructional program.</td>
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<td>b. Our teachers need to be trained for an effective drug education program.</td>
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<td>c. Children should be seen and not heard.</td>
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<td>d. Independent learning is a means of fostering increased responsibility.</td>
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<td>e. The new grade reporting system should be extended to the elementary schools.</td>
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<td>f. Students should be given assignments that allow expression of creativity.</td>
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<td>g. We need better communication among the staff.</td>
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<td>h. Parents and teachers must work together in the educational process.</td>
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<td>i. We need culture-fair intelligence tests.</td>
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<td>j. The rate of illegitimate pregnancies among high school girls must be reduced.</td>
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<td>k. Teachers need to be paid commensurate with their professional responsibilities.</td>
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<td>l. Students should have awareness of basic ecological principles.</td>
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Girls as well as boys need a strong program of competitive athletics.

Use of auxiliary teacher aides should be implemented throughout the district by February.

Our graduates should leave school equipped to get a job or to continue their education.

Our district should establish appropriate standards for high school graduation.

2. Under which of the following circumstances is it **not** necessary to ensure compatibility of goals with the district's existing statement of educational philosophy? (Check one or more.)

   - a. The existing philosophy statement is only a vague statement of the district's educational purposes.
   - b. The existing philosophy statement is not representative of the community.
   - c. The existing philosophy statement does not enumerate student behaviors, knowledge, skills, and attitudes which the district hopes to achieve through its instructional programs.
   - d. A statement of the district's educational philosophy does not exist.

3. How can instructional planners tell when they have set enough goals for their school district?
Suggested Responses

for Module One Self-Test

Please do not refer to the Suggested Responses until you have attempted all the items on the self-test.
Various goals and objectives are listed below. Some are stated in terms of student outcomes of a school program, and some are stated in terms of school concerns other than student outcome. Decide whether each goal or objective concerns a student outcome or not, and check the appropriate line next to each.

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<td>m. Girls as well as boys need a strong program of competitive athletics.</td>
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<td>n. Use of auxiliary teacher aides should be implemented throughout the district by February.</td>
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</table>
Our graduates should leave school equipped to get a job or to continue their education. 

Our district should establish appropriate standards for high school graduation. 

Note: Outcomes b, g, k, and n are stated in terms of desired outcomes for staff rather than for students; outcomes e, i, and p certainly involve students, but are stated in terms of administrative policies and procedures; and outcome h is a community relations concern rather than a student outcome.

2. Under which of the following circumstances is it not necessary to ensure compatibility of goals with the district's existing statement of educational philosophy? (Check one or more.)

- The existing philosophy statement is only a vague statement of the district's educational purposes.
- The existing philosophy statement is not representative of the community.
- The existing philosophy statement does not enumerate student behaviors, knowledge, skills, and attitudes which the district hopes to achieve through its instructional programs.
- A statement of the district's educational philosophy does not exist.

Note: Educational philosophy statements typically are only vague statements of the district's purposes (statement a) which will subsequently be refined into goals, goal indicators, curricular objectives, etc. Philosophy statements are not intended to enumerate student outcomes which the district hopes to achieve (statement c) but only to establish the general philosophy underlying those outcomes.

3. How can instructional planners tell when they have set enough goals for their school district?

They can check whether their list of goals is comprehensive, that is whether it includes goals pertinent to all the major life areas or roles for which students should be prepared.
THE MCUSD GOAL SETTING EFFORT

Episode One

MCUSD has engaged an educational management consultant to conduct a training course on Setting Goals for the Instructional Planning Team. In an effort to establish a starting point for the goal setting effort, the consultant searched the Central Office files for information concerning the district's stated educational intentions or purposes. A Statement of Educational Philosophy adopted by the School Board a year ago was on file.

At the first training session, the consultant asks the IPT to decide whether MCUSD's existing philosophy statement by itself is an adequate statement of MCUSD's educational intentions or purposes, or whether they need to derive a supplementary list of goals to which MCUSD is committed.

To help the IPT avoid writing goals "from scratch," the consultant has also gathered some representative goals from actual educational goal statements developed elsewhere. He will present these goals to the IPT for their examination, as they think about the kinds of goals that should be included in the MCUSD Goal Statement.
INSTRUCTIONS FOR FIRST TEAM ACTIVITY

Evaluating Philosophy

Your first task is to evaluate the adequacy with which MCUSD's existing statement of educational philosophy conveys MCUSD's educational intentions or purposes. Proceed as follows:

1. Read the MCUSD Statement of Educational Philosophy on page 39.

2. Decide as a team whether this is only a statement of overall philosophy, or is, in fact, adequate as a complete goal statement.

3. Have one of your team members record the team's decision on Worksheet 1, which you'll find on page 41. Be prepared to discuss the reasons for your teams' decisions.

4. When your team has filled out Worksheet 1, review the Suggested Responses on page 43.
Statement of Educational Philosophy

Education is essentially a moral enterprise, simply because adults decide that the young should grow up in certain ways and should learn certain kinds of things rather than others. The judgments made by the schools directly influence the development of each child, and can provide both possibilities for freedom and constraints upon individual freedom. We must make sure that development of individual freedom becomes the personal project of every child during the years he or she attends the Mid City Unified Schools.

It is only through their own efforts and experiences that students will come to be free to choose, and will gain freedom from the constraints of others and of their environment. Although freedom must be won by each individual student, the schools can assist students in developing individual freedom by maintaining a free environment—by encouraging choice and by generating educational alternatives. The schools must design each instructional experience with the objective of encouraging freedom and choice, of providing maximum opportunity for all students to engage freely in self-expressive activity in each new context.
WORKSHEET 1

Evaluating Philosophy

Is MCUSD's existing Statement of Educational Philosophy an adequate statement of the district’s educational purposes?

Yes  No

Have one of your team members write a brief explanation below of why the team decided that MCUSD’s philosophy statement is or is not adequate:

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SUGGESTED RESPONSES FOR FIRST TEAM ACTIVITY

Evaluating Philosophy

After your Instructional Planning Team has reviewed and discussed MCUSD's Statement of Educational Philosophy, the consultant asked for his opinion. He makes these comments:

The MCUSD Statement of Educational Philosophy emphasizes a particular approach to instruction—that is, maintaining a free environment and encouraging choice on the part of students. In this broad sense, the philosophy statement does provide some guidance for instructional decision making.

But I think the philosophy statement fails to adequately convey MCUSD's educational purposes because it is too vague and abstract to provide needed direction to school staff who are responsible for implementing instructional programs to achieve those purposes.

Although it is desirable to have an overall philosophy statement like this to introduce the district's goals, by itself it is not a goal statement for two reasons:

1. It does not enumerate the general student outcomes (that is, behaviors, attitudes, knowledge, skills, or states of being) that MCUSD hopes to achieve by involving students in its instructional program; and

2. It is not comprehensive with respect to the major life areas for which MCUSD must prepare its students.

Therefore, you should probably proceed to derive a set of goals that will build upon this educational philosophy. The goals you select should ideally reflect, or at least not conflict with, the emphasis on development of individual freedom. I am assuming, of course, that this statement is still a valid reflection of the district's philosophy.

WHEN YOUR TEAM HAS FINISHED COMPARING THIS RATIONALE WITH YOUR RESPONSE ON WORKSHEET 1, AND HAS DISCUSSED ANY DIFFERENCES OF OPINION WITH THE COORDINATOR, PROCEED TO THE SECOND TEAM ACTIVITY WHICH BEGINS ON THE NEXT PAGE.
INSTRUCTIONS FOR SECOND TEAM ACTIVITY

Screening Goals

Assuming that your Instructional Planning Team decided that MCUSD's Statement of Educational Philosophy is not an adequate statement or purpose for MCUSD, that is, it does not enumerate the major life areas for which MCUSD hopes to prepare its students, now you must begin to think about the kinds of goals that are needed to amplify MCUSD's philosophy statement. The next task for your team is to screen some goals which the consultant has gathered for your examination, by following these steps:

1. First, decide as a team what are the major aspects of life, or goal categories, for which MCUSD should prepare its students. (If you do not wish to establish your own categories, you may use the six aspects of life suggested by Tyler on page 27.) Have one of your team members write each of the life areas you decide on on the spaces opposite "Life Areas" on Worksheet 2, which follows this page.

2. Remove and separate the yellow goal cards which follow Worksheet 2, and read them. On each card is a goal typical of those found in educational goal statements.

3. After reading all the goal cards, as a team sort them according to the life areas that you recorded on Worksheet 2. Continue until you have sorted all the cards into piles, each pile referring to a different life area. (Depending on the categories you established, you may not have a pile of goal cards for every life area, and/or you may decide that some goal cards pertain to more than one life area.)

4. Beneath each life area recorded on Worksheet 2, list the code numbers (in the upper left-hand corner of each goal card) of all the goals you sorted into that pile.

5. When you have finished categorizing the goals, review the Suggested Responses beginning on page 49.
WORKSHEET 2
Screening Goals

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SUGGESTED RESPONSES FOR SECOND TEAM ACTIVITY

Screening Goals

After reviewing and categorizing the sample goals provided by the consultant, your Instructional Planning Team asks the consultant to provide some other examples of how the goal cards could be categorized, so that the team can determine whether they're satisfied with their own classification. The consultant obliges by presenting two examples and explaining:

1. The first example (which you'll find on pages 50-51) is based on seven life areas, or goal categories, that were identified by another school district I've been working with. Using their categories, I can place almost every goal card in a single category. (Goal card T-6 is applicable to both categories A. Health and G. Self-Fulfillment.)

2. In the second example (on pages 52-53) the goal cards are categorized in quite a different way. This categorization is based on the six aspects of life suggested by Ralph Tyler in your training (see page 27). Certain goals pertain to just one of these six life aspects, and I have listed them in the left-hand column below each life area. But ten goals, pertaining to accumulation of knowledge, mastery of basic academic skills, attitude toward learning, etc., appear equally applicable to each of the six life aspects—in other words, they represent basic outcomes that will prepare students to perform better in all aspects of life. So I have listed them on the right-hand column below every life aspect. If you decide to use Tyler's list of life aspects, or a similar classification that focuses on anticipated life roles, you should probably rewrite basic goals like these so that they will pertain to each of the specific life areas.

I hope these two examples will help you to evaluate the adequacy of your categorization of the goal cards. After you review them, you may decide to stick to your own classification, to use one of the two examples I've presented, or to revise your classification.

WHEN YOUR TEAM HAS HAD A CHANCE TO REVIEW THE TWO EXAMPLES AND TO COMPARE THEM WITH YOUR OWN CATEGORIZATION, GO ON TO THE LAST TEAM ACTIVITY FOR MODULE ONE WHICH BEGINS ON PAGE 55.
### Example #1 - Categorization of Goal Cards

#### A. HEALTH

- C-10 Physical Health and Safety
- C-11 Mental Health
- P-6 Good Health Habits
- T-6 Mental and Physical Health

#### B. ABILITY TO BE SELF-SUPPORTING

- C-15 Career and Occupational Selection
- C-16 Career and Occupational Preparation
- C-17 Homemaking
- C-18 Economic and Consumer Efficiency
- T-2 Economic and Vocational Competence

#### C. SOCIAL CONSCIOUSNESS

- C-6 Peer Relationships
- C-7 Individual Relationships with State and Local Agencies
- C-8 Democratic Principles and Loyalty
- C-9 Inter-Relationships of Peoples
- P-2 Understanding and Appreciation of Persons of other Groups
- P-5 Responsible Citizenship
- T-3 Citizenship and Civic Responsibility
- T-4 Competence in Human and Social Relations
Example #1 - Categorization of Goal Cards

<table>
<thead>
<tr>
<th>D. MORAL UPRIGHTNESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-12 Character Development</td>
</tr>
<tr>
<td>T-5 Moral and Ethical Values</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>E. ABILITY TO IMPROVE AND MAINTAIN THE CULTURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-4 Desire for Knowledge and Continuing Education</td>
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<tr>
<td>C-5 Adaptability</td>
</tr>
<tr>
<td>P-4 Positive Attitude toward School and Learning</td>
</tr>
<tr>
<td>P-8 Preparation for Productive Life</td>
</tr>
<tr>
<td>P-9 Appreciation of Human Achievement</td>
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<tr>
<td>P-10 Continuing Education</td>
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<table>
<thead>
<tr>
<th>F. INTELLECTUAL FUNCTIONING</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-1 Accumulation of Knowledge</td>
</tr>
<tr>
<td>C-2 Skill to Acquire and Transmit Knowledge</td>
</tr>
<tr>
<td>C-3 Skill to Use and Evaluate Knowledge</td>
</tr>
<tr>
<td>P-3 Mastery of Basic Skills in Use of Words and Numbers</td>
</tr>
<tr>
<td>T-1 Intellectual Discipline</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>G. SELF-FULFILLMENT</th>
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<tbody>
<tr>
<td>C-13 Aesthetic Appreciation</td>
</tr>
<tr>
<td>C-14 Avocational and Leisure Time</td>
</tr>
<tr>
<td>P-1 Self-Understanding</td>
</tr>
<tr>
<td>P-7 Opportunity to be Creative</td>
</tr>
<tr>
<td>T-6 Self-Realization</td>
</tr>
</tbody>
</table>
### Example #2 - Categorization of Goal Cards

#### A. HEALTH

<table>
<thead>
<tr>
<th>C-1</th>
<th>Accumulation of Knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-2</td>
<td>Skill to Acquire and Transmit Knowledge</td>
</tr>
<tr>
<td>C-3</td>
<td>Skill to Use and Evaluate Knowledge</td>
</tr>
<tr>
<td>C-4</td>
<td>Desire for Knowledge and Continuing Education</td>
</tr>
<tr>
<td>C-5</td>
<td>Adaptability</td>
</tr>
<tr>
<td>C-10</td>
<td>Physical Health and Safety</td>
</tr>
<tr>
<td>C-11</td>
<td>Mental Health</td>
</tr>
<tr>
<td>C-12</td>
<td>Character Development</td>
</tr>
<tr>
<td>P-1</td>
<td>Self-Understanding</td>
</tr>
<tr>
<td>P-6</td>
<td>Good Health Habits</td>
</tr>
<tr>
<td>T-5</td>
<td>Moral and Ethical Values</td>
</tr>
<tr>
<td>T-6</td>
<td>Self-Realization and Mental and Physical Health</td>
</tr>
</tbody>
</table>

#### B. IMMEDIATE SOCIAL RELATIONSHIPS

<table>
<thead>
<tr>
<th>C-1</th>
<th>Accumulation of Knowledge</th>
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</thead>
<tbody>
<tr>
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<td>Skill to Acquire and Transmit Knowledge</td>
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<tr>
<td>C-3</td>
<td>Skill to Use and Evaluate Knowledge</td>
</tr>
<tr>
<td>C-4</td>
<td>Desire for Knowledge and Continuing Education</td>
</tr>
<tr>
<td>C-5</td>
<td>Adaptability</td>
</tr>
<tr>
<td>C-6</td>
<td>Peer Relationships</td>
</tr>
<tr>
<td>P-2</td>
<td>Understanding and Appreciation of Persons of Other Groups</td>
</tr>
<tr>
<td>T-4</td>
<td>Competence in Human and Social Relations</td>
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</table>

#### C. SOCIO-CIVIC RELATIONSHIPS

<table>
<thead>
<tr>
<th>C-1</th>
<th>Accumulation of Knowledge</th>
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<tbody>
<tr>
<td>C-2</td>
<td>Skill to Acquire and Transmit Knowledge</td>
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<tr>
<td>C-3</td>
<td>Skill to Use and Evaluate Knowledge</td>
</tr>
<tr>
<td>C-4</td>
<td>Desire for Knowledge and Continuing Education</td>
</tr>
<tr>
<td>C-5</td>
<td>Adaptability</td>
</tr>
<tr>
<td>C-7</td>
<td>Individual Relationships with State and Local Agencies</td>
</tr>
<tr>
<td>C-8</td>
<td>Democratic Principles and Loyalty</td>
</tr>
<tr>
<td>C-9</td>
<td>Inter-Relationships of Peoples</td>
</tr>
<tr>
<td>P-5</td>
<td>Responsible Citizenship</td>
</tr>
<tr>
<td>T-3</td>
<td>Citizenship and Civic Responsibility</td>
</tr>
</tbody>
</table>
### Example #2 - Categorization of Goal Cards, continued

#### D. CONSUMER ASPECTS OF LIFE

| C-1 | Accumulation of Knowledge |
| C-2 | Skill to Acquire and Transmit Knowledge |
| C-3 | Skill to Use and Evaluate Knowledge |
| C-4 | Desire for Knowledge and Continuing Education |
| C-5 | Adaptability |
| P-3 | Mastery of Basic Skills in Use of Words and Numbers |
| P-4 | Positive Attitude toward School and Learning |
| P-9 | Appreciation of Human Achievement |
| P-10 | Continuing Education |
| T-1 | Intellectual Discipline |

| C-18 Economic and Consumer Efficiency |
| T-2 Economic Competence |

#### E. OCCUPATIONAL LIFE

| C-1 | Accumulation of Knowledge |
| C-2 | Skill to Acquire and Transmit Knowledge |
| C-3 | Skill to Use and Evaluate Knowledge |
| C-4 | Desire for Knowledge and Continuing Education |
| C-5 | Adaptability |
| P-3 | Mastery of Basic Skills in Use of Words and Numbers |
| P-4 | Positive Attitude toward School and Learning |
| P-9 | Appreciation of Human Achievement |
| P-10 | Continuing Education |
| T-1 | Intellectual Discipline |

| C-15 Career and Occupational Selection |
| C-16 Career and Occupational Preparation |
| C-17 Homemaking |
| P-8 Preparation for Productive Life |
| T-2 Vocational Competence |

#### F. RECREATIONAL

| C-13 Aesthetic Appreciation |
| C-14 Avocational and Leisure Time |
| P-7 Opportunity to be Creative |
| P-8 Preparation for Productive Life |
| C-3 | Accumulation of Knowledge |
| C-2 | Skill to Acquire and Transmit Knowledge |
| C-3 | Skill to Use and Evaluate Knowledge |
| C-4 | Desire for Knowledge and Continuing Education |
| C-5 | Adaptability |
| P-3 | Mastery of Basic Skills in Use of Words and Numbers |
| P-4 | Positive Attitude toward School and Learning |
| P-9 | Appreciation of Human Achievement |
| P-10 | Continuing Education |
| T-1 | Intellectual Discipline |
INSTRUCTIONS FOR THIRD TEAM ACTIVITY

Deriving District Goals

Now that you are familiar with both the district's educational philosophy and some representative goals that could be included in MCUSD's goal statement, your team's final task for this module is to compile a set of goals for MCUSD, by completing the following steps:

1. First, decide which life areas you want to use to ensure that your list of goals is comprehensive—you may either stick to the life areas your team listed on Worksheet 2 or use one of the classifications presented in the suggested responses on pages 50-53, if you prefer.

2. As a team, select from each life area the goal, or goals, most compatible with MCUSD's Statement of Educational Philosophy. Circle the code numbers of the goals you select on Worksheet 2 (or on the Suggested Responses, if applicable). You may revise any of the goal cards, if you wish.

3. Since the goal cards with which you were provided come from three actual educational goal statements, there are similarities among some of the goals. Be wary of selecting redundant goals for inclusion in your goal statement. Remember that comprehensiveness refers to inclusion of goals that pertain to each of the major life areas with which schools must concern themselves in educating students.

4. If there are any life areas you want to cover in the Goal Statement for which no goal cards were provided, write your own goal(s) for those areas so that your goal statement will be comprehensive. You have some blank yellow cards for this purpose. Number any additional goals you write 0-1, 0-2, etc., to indicate that these are your "own" goals, and record their code numbers on Worksheet 2 beneath the life area to which they pertain. Be sure that any additional goals you write are stated in terms of student outcomes, and are compatible with MCUSD's educational philosophy.

5. If you want your Goal Statement to reflect a particular sequence or priority among the goals you have selected, arrange the goal cards in order.

6. When you have compiled your list of goals, wait for instructions from the coordinator. Be prepared to exchange your team's copy of Worksheet 2 and the set of goal cards you selected with another team, and to evaluate another team's list of goals by completing the Evaluation Sheet on page 57.
Goals compiled by Team _______ - Goals evaluated by Team _______

**Evaluation Sheet**

Obtain another team's copy of Worksheet 2 (or of the Suggested Responses with code numbers of selected goals circled, if applicable) and the set of goal cards they compiled. Indicate in the top margin of this Evaluation Sheet which team compiled the set of goals you are evaluating, and your own team as well.

As a team, review the set of goal cards and the life areas identified on Worksheet 2, and then have one member of your team write brief answers to each of the following questions. Return this Evaluation Sheet to the appropriate team when you are finished and be prepared to discuss your evaluation with them, if they wish.

**HOW SATISFACTORY IS THE SET OF GOALS COMPIL ED BY THIS TEAM FOR THE MCUSD GOAL STATEMENT IN TERMS OF:**

1. **FOCUS ON STUDENT OUTCOMES RATHER THAN OTHER SCHOOL CONCERNS?**
   (That is, does each goal specify a student behavior, attitude, knowledge, skill, or state of being that might result from involvement in some aspect of the school program?)

2. **COMPATIBILITY WITH THE MCUSD STATEMENT OF EDUCATIONAL PHILOSOPHY?**
   (That is, do the goals reflect the MCUSD philosophy statement's emphasis on development of individual freedom? If not, which goals conflict with this emphasis?)

3. **COMPREHENSIVENESS WITH RESPECT TO MAJOR LIFE AREAS?**
   (That is, has at least one goal been included for each life area specified by the team? Do the life areas specified by the team cover all the major aspects of life for which a student needs to be prepared? In attempting to be comprehensive, have two or more goals that say essentially the same thing been included?)
<table>
<thead>
<tr>
<th>C-1</th>
<th>The schools should have goals concerning students' accumulation of knowledge.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-2</td>
<td>The schools should have goals concerning students' skill to acquire and transmit knowledge.</td>
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</table>

<table>
<thead>
<tr>
<th>C-3</th>
<th>The schools should have goals concerning students' skill to use and evaluate knowledge.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-4</td>
<td>The schools should have goals concerning students' desire for knowledge and continuing education.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>C-5</th>
<th>The schools should have goals concerning students' adaptability.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-6</td>
<td>The schools should have goals concerning students' peer relationships.</td>
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<table>
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<tr>
<th>C-7</th>
<th>The schools should have goals concerning students' individual relationships with state and local agencies.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-8</td>
<td>The schools should have goals concerning students' democratic principles and loyalty.</td>
</tr>
</tbody>
</table>
The schools should have goals concerning students' understanding of the interrelationships of peoples.

The schools should have goals concerning students' physical health and safety.

The schools should have goals concerning students' mental health.

The schools should have goals concerning students' character development.

The schools should have goals concerning students' aesthetic appreciation.

The schools should have goals concerning students' avocational and leisure time.

The schools should have goals concerning students' career and occupational selection.

The schools should have goals concerning students' career and occupational preparation.
The schools should have goals concerning students' homemaking abilities.

Quality education should help every child acquire the greatest possible understanding of himself and appreciation of his worthiness as a member of society.

Quality education should help every child acquire to the fullest extent possible for him mastery of the basic skills in the use of words and numbers.

Quality education should help every child acquire the habits and attitudes associated with responsible citizenship.

Quality education should help every child acquire good health habits and an understanding of the conditions necessary for the maintenance of physical and emotional well-being.
Quality education should give every child opportunity and encouragement to be creative in one or more fields of endeavor.

Quality education should help every child understand the opportunities open to him for preparing himself for a productive life and should enable him to take full advantage of these opportunities.

Quality education should help every child to understand and appreciate as much as he can of human achievement in the natural sciences, the social sciences, the humanities and the arts.

Quality education should help every child to prepare for a world of rapid change and unforeseeable demands in which continuing education throughout his adult life should be a normal experience.

Public education should help each individual to achieve intellectual discipline.

Public education should help each individual to achieve economic and vocational competence.

Public education should help each individual to achieve citizenship and civic responsibility.

Public education should help each individual to achieve competence in human and social relations.
<table>
<thead>
<tr>
<th>T-5</th>
<th>T-6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public education should help each individual to achieve moral and ethical values.</td>
<td>Public education should help each individual to achieve self-realization and mental and physical health.</td>
</tr>
</tbody>
</table>
REFINING GOALS INTO GOAL INDICATORS

Overview

In Module One you derived a list of goals for a district goal statement. Module Two is concerned with helping you refine your goals into goal indicators that elaborate upon, or explain what can be observed in those who have achieved, each goal. You will see how goals are elaborated on in typical goal statements. You will receive four criteria for specifying goal indicators for any goal. In teams you will select a goal and specify goal indicators for it, using real-life goal statements and predictions about the future as additional input.

When you are finished with Module Two, you should be able to:

1. Specify criteria for refining goals into goal indicators.
2. Evaluate sample goal indicators as to the extent to which they meet each criterion.
3. Specify goal indicators, each of which represents the goal, involves a life-related outcome, involves an observable outcome, and is positive in nature.

I. The Reasons for Specifying Goal Indicators

Refining goals into goal indicators serves a dual purpose. First, it tells school-related groups what the achievement of a particular goal might mean in the future lives of students. Since a goal is broad and ambiguous, it can be interpreted in countless ways, not all of which are intended by the school district. Each goal indicator for a goal represents one possible interpretation of that goal, and thus gives those groups and individuals concerned with the schools' goals a clearer idea of their implications.

Second, it allows school-related groups to give school decision makers their opinions concerning which goal indicators they most want to see achieved for a particular goal. By involving school-related groups in generating goal indicators and in setting priorities among them, the school district gains a better understanding of the types of outcomes that are desired for students in the long run. This information can then serve as important input into decisions concerning instructional objectives and programs.

In this module several criteria are discussed for specifying individual goal indicators. Your team will specify a number of individual goal indicators for one of its goals. Then in Modules Three and Four you will receive additional criteria to use in evaluating a set of goal indicators and assigning priorities to them. In order for the criteria for the final set of goal indicators to be met fully, your team should try to specify as many goal indicators as possible, so that there are many available from which to select the final set.
You should try to write goal indicators that are more specific than goals and less specific than curricular objectives. You may wish to review the discussion of the stages of the goal refinement process on pages 2-5 in the Introduction to help you determine the appropriate degree of specificity at which to write your goal indicators. Generally speaking, your goal indicators should not be this broad:

Every learner should acquire those skills, knowledges, and attitudes required for independent, autonomous learning.

Each person should develop understanding and acceptance of individuals or groups belonging to diverse cultures.

nor this specific:

When presented with a statement regarding a controversial issue (e.g., racial prejudice), he will seek out and examine at least two other viewpoints, identify each, compare and contrast, and then state within a specified time, his final opinion regarding the issue.

Using a simulated set of data, he will analyze a set of budget figures, determine the computational errors contained in the figures, and correctly explain the economic principles(s) underlying each error.

Overly broad or specific goal indicators can be revised during the next module when you will screen your goal indicators as a set.

In real life, a planning team would specify goal indicators over a fairly long-time period, and also might ask representatives of school-related groups to submit lists of goal indicators. Thus the team would be able to compile a large number of indicators to submit to various school-related groups for formal assessment. During this training unit, however, time constraints will limit you to considering only the goal indicators specified by the team itself. Furthermore, your team will probably not be able to specify an exhaustive list. Please remember these differences between intensive training and real life, and try to learn as much as you can about the process of goal setting so that you can apply that process in the most effective way in your actual school setting.

As we have said, there might be countless goal indicators for a given goal. In the sections that follow, some criteria are discussed for evaluating each goal indicator that results from this step of the goal refinement process. The criteria are:

1. EACH GOAL INDICATOR SHOULD REPRESENT THE GOAL.

2. EACH GOAL INDICATOR SHOULD SPECIFY A LIFE-RELATED OUTCOME.

3. EACH GOAL INDICATOR SHOULD SPECIFY AN OBSERVABLE OUTCOME.

4. EACH GOAL INDICATOR SHOULD BE POSITIVE.
In many cases one cannot simply determine that a particular goal indicator meets a criterion or does not meet it. Perhaps the criteria can only be applied relatively, by asking such questions as: "How closely does this goal indicator represent this goal?" or "Which of these two possible goal indicators is more observable?" Some examples of goal indicators that—relatively speaking—meet and do not meet each criterion will be presented in the following sections. Then the nature of the elaborations of goals that are typically included in educational goal statements will be discussed.

II. Each Goal Indicator Should Represent the Goal

For the goal "The student will acquire good health habits," here are two possible indicators:

He will eat well balanced meals.

He will be able to prepare well balanced meals.

The first indicator better represents the goal of acquiring good health habits, since most adult persons can control the kinds of food they will eat. The second indicator requires expertise in cooking, which does not represent the goal of acquiring good health habits. (This might be a good goal indicator for the goal "be a competent homemaker," however.)

For the goal "Responsible Citizenship," two possible goal indicators might be:

Will vote in elections for which he is eligible.

Will contribute at least one percent of his yearly income to parties or candidates of his choice.

The former indicator is part of the commonly accepted conception of the responsible citizen. The latter, however, prescribes a course of action that might not be possible for many citizens having tight incomes. Thus it is not a very good representation of the goal in question.

If the goal itself is ambiguous, the process of goal refinement may help to clarify its meaning; possibly one could then restate the goal to correspond better to the goal indicators intended by it. For example:

Goal: Competency to Contend with Future Change

Goal Indicators:

1. To accumulate knowledge about the world of work and make appropriate vocational choices.

1This example is from the Morgan Hill Unified School District Educational Goals, presented in "Evolving Educational Goals for California Schools: Four Case Studies," prepared by the Institute for Educational Development, El Segundo, California for the California School Boards Association, 1970.
2. To develop a marketable skill.

3. To develop economic competence and understanding in personal buying, selling, and investment.

4. To develop the ability to adjust to a changing environment and the changing demands of society.

Goal Indicator No. 4 appears to be almost synonymous with the goal, while the first three indicators appear to have more to do with economic and vocational competence than with "competency to contend with future change." Thus one might divide this goal into two goals, one concerning Economic and Vocational Competence (with Goal Indicators 1-3) and another concerning Competency to Contend with Future Change (with Goal Indicator 4). It would probably also be necessary to write additional goal indicators for the latter goal, e.g.:

5. To seek retraining to update his skills in accordance with changing job trends.

6. To keep informed about political, social, and economic trends which may affect his personal existence.

III. Each Goal Indicator Should Specify a Life-Related Outcome

The definition of goal indicator, presented in the Introduction, emphasized that goal indicators are long-range behaviors that one can expect to observe in the lives of those who have achieved a goal. We are using the term "life-related" behaviors to include outcomes that: a) are desirable in later life as well as in the school context, or b) occur only in adulthood and are not typically manifested by students while they are still in school. We are using the term "school-related" behaviors, by contrast, to include outcomes that: a) can be observed only in the school context, b) are only means to ends and therefore not of concern outside the school context, or c) manifest a more general, life-related outcome but are measured and taught within the school context. Examples of each type of life-related and school-related behavior are presented below.

Life-related behaviors

(a) Some of the behaviors that are desirable in later life are also a concern in the school context, e.g.:

- will be able to add and subtract simple figures.
- Ability to grasp and solve conceptual problems.

(b) Some outcomes occur only in adulthood and are not directly manifested by students while they are still in school, e.g.:

Involvement in a satisfactory marriage and family relationship.
School-related behaviors

(a) A behavior that can be observed only in the school context is a school-related outcome, e.g.:

*He shows respect and liking for his teachers.*

*The student hands in assignments on time.*

*Will consult the counsellor before selecting courses.*

(b) Other behaviors emphasized in the school context may be of little concern in the long run, since they are only means to ends, e.g.:

*Ability to recite the multiplication table.*

(c) The other type of school-related outcome is behavior that manifests a more general, life-related outcome, but is measured and taught within the school context, e.g.:

*Life-related outcome: Ability to grasp and solve conceptual problems.*

School-related manifestation of this life-related outcome:

*Students' ability to grasp and solve mathematical problems presented in high school mathematics tests.*

The distinction between "life-related" and "school-related" is a matter of emphasis, then, rather than referring to mutually exclusive kinds of desirable behaviors. In this training you will be encouraged to write goal indicators that emphasize life-related outcomes.

One difficulty in specifying meaningful goal indicators is that the life conditions of today may be far different from those which students will face as adults. Thus certain goal indicators which seem appropriate now may become obsolete in a decade or less because of the rapid rate of social and technological change. Specifying goal indicators is in some ways a guessing game, in which the instructional planner must try to "predict" the future. Actually, scholars have already gathered considerable information about what the future is likely to be, and when we can expect major changes to occur, based on projections of present trends. Such predictions are probably the best information available to ensure that the goal indicators you specify will be life-related outcomes that students should be able to demonstrate during later life.
Parents, businessmen, and other school-related groups may not be expert in determining what school-related outcomes the schools should encourage students to achieve, but it is legitimate to ask them what life-related outcomes they hope will result from the educational process. Thus to be of greatest value for planning and decision making, the goal indicators for a particular goal should stress life-related rather than school-related outcomes.

IV. Each Goal Indicator Should Specify an Observable Outcome

The examples of goal indicators provided so far have generally been behaviors that can be observed—eating, voting, demonstrating a marketable skill, etc. We have purposely used the term "observable" rather than "measurable." Our definition of an observable behavior is one which can be demonstrated in behavior, but for which the means of measurement, that is, the particular behaviors to be measured and the conditions and standards for measurement, may not be specified. Our definition of a measurable behavior is one which can be demonstrated in behavior and for which the means of measurement have been specified. Thus a measurable behavior is also observable, but an observable behavior is not measurable unless it specifies how the behavior is to be measured. The criterion that goal indicators be only observable rather than both observable and measurable is emphasized in this training unit because:

a) At the step of goal refinement where goal indicators are specified, the desired outcomes are sometimes still not very explicit about the specific behaviors to be observed. For example, "to demonstrate a marketable skill" seems to be an indicator of the goal "economic and vocational competence." But obviously a person who has achieved this goal will display different behaviors depending upon which marketable skill he has developed. A tool and die maker, a teacher, and a journalist each have marketable skills but they do not demonstrate the same behaviors when they practice those skills. If one were to observe each of these persons at work for a few days, one could infer from his behavior whether he had achieved the goal indicator of demonstrating a marketable skill.

b) The school cannot generally take responsibility for measuring the achievement of goal indicators. Many occur too far from the school context and too long after students have left school for the school to attempt to measure their achievement directly. It is more appropriate for the school to measure achievement of curricular and instructional objectives, which occurs within the school context.

There is a danger that school planners will go "too far" in specifying goal indicators, by trying to make them fully explicit and measurable. Since their main purpose is to clarify and focus the schools' aims, rather than to specify learning activities and evaluate learner outcomes, the goal indicators should be stated in simple, nontechnical terms which are meaningful to parents and students as well as to instructional staff.
V. Each Goal Indicator Should Be Positive

One characteristic of goals is that, by virtue of their broad and general nature, they state outcomes that everyone agrees are desirable. Furthermore, goals are stated in positive, or even ideal, terms. Some of the potential goal indicators for a goal, however, may not be positive. In areas where existing student behavior is perceived to be a problem, some people may state goal indicators in negative terms:

Alumni of this school system will not use abusive drugs.

They will not engage in actions detrimental to the American way of life.

Since the specification of goal indicators is meant to give all school-related groups a clearer picture of what behaviors to look for in those who have achieved the goals, and to help school planners develop a constructive educational program for their students, goal indicators should be phrased in positive terms.

VI. Elaborations of Goals in Goal Statements

Earlier in this training unit the suggestion was made that instructional planners examine goal statements which originated elsewhere when setting goals for their district. The question might arise as to whether the global goals only, or the goals along with the elaborations of them typically included in a goal statement, should be adopted. This training unit has suggested developing a comprehensive goal statement, and including for each goal a number of goal indicators, each of which: a) is related to the goal, b) specifies a life-related outcome, c) specifies an observable outcome, and d) is positive. In effect what is being suggested is a particular type of elaboration of the goals—namely, a set of goal indicators meeting the above criteria. In analyzing existing goal statements for possible adoption or adaptation, you should evaluate the elaborations presented for each goal against the same criteria.

Some of the elaborations of goals found in typical goal statements fail to meet one or more of the criteria for goal indicators. To begin with, sometimes they are not even broken down into discrete items, but are simply a detailed description of the various facets of the goal, e.g.:

Quality education should help every child acquire good health habits and an understanding of the conditions necessary for the maintenance of physical and emotional well-being.

In his own interest as well as in the interest of society at large, a child should know how to take care of himself and how to keep himself physically fit. He should know what the

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requirements are for physical and mental health and what practices, harmful to health, should be avoided. Mere knowledge of these matters, however, is not sufficient. In cases where the home has been deficient in encouraging the child to practice sound health habits, the school has an obligation to be aware of the situation and to see that the opportunity for remedying the deficiency is provided.

Such elaborations would probably have to be broken down into all the behaviors they allude to before the criteria could be applied.

Like goals, there are many elaborations of goals that have already been written by schools. In refining goals into goal indicators, instructional planners may find it helpful to examine these elaborations for applicability to their goals. Though the elaborations of goals written by other educational institutions may not meet all the criteria for goal indicators, they can usually be rewritten to meet these criteria and still convey the meaning intended. The use of goal indicators that are based on available elaborations of goals will help school planners write enough goal indicators to cover all the important areas of behavior related to the goal.

The use of these four criteria will not ensure that every goal indicator generated should be an aim of the schools. There are other types of criteria that need to be applied, which will be covered later in this training unit.
Module Two Self-Test

Complete this self-test to determine how well you understand the process of refining goals into goal indicators.

Feel free to refer to the reading if you need help in responding to any of the items, but do not review the suggested responses until you have attempted all the items.

1. Below are several possible goal indicators for this goal: To help each student develop systematic reasoning ability. Some of them are not representative indicators of behavior one could observe in students who have achieved the goal, because they call for knowledge or skills above and beyond the ability to reason. Check the two goal indicators that best represent the goal.

_____ a. Can create many unique, original solutions to problems.

_____ b. Can locate much relevant information for analyzing problems and generating alternative solutions.

_____ c. Can infer practical solutions to problems by comparing them to other problems he knows how to solve.

_____ d. Can apply mathematical concepts to solutions of common practical problems.

_____ e. Can determine the most feasible course of action by inferring the logical consequences of alternative actions.

2. Below is a three-part elaboration of the following goal: To help each student master basic academic skills. The problem with the elaboration is that school-related rather than life-related outcomes are emphasized. Below each part of the elaboration, write one goal indicator, corresponding to all or part of the statement, that specifies a life-related outcome.

a. He should have developed a high level of reading skill. Reading is the foundation upon which all education is based. Development of reading should be related to other subjects and should include appreciation of good literature.
b. He should have received instruction in language, spelling and composition.

The importance of English, its correct use in spoken and written form, cannot be over-stressed. Language best serves communication when properly used, grammatically and expressively.

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c. He should have developed an understanding of mathematics and its practical applications.

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3. For each pair of goal indicators listed below, check the one that specifies the more observable outcome:

_____ a. Understands the scientific method and the importance of measurement in science.

_____ b. Makes reasonable predictions based on known information, observations, and/or experimentation, and finds evidence to verify or disprove them.

____ a. Appreciates the importance of observation in science, and sees the relationship between cause and effect.

____ b. Is observant of conditions and events in his environment, and tries to formulate possible explanations for what he observes.

____ a. Takes personal measures to protect the environment and to avoid waste of natural resources.

____ b. Is aware of and concerned about man's responsibility for his environment.
4. The goal indicators listed below are unacceptable because they are not positive--they do not indicate behaviors that one can look for in those students who have achieved a goal. In the space provided below each statement, write a corresponding goal indicator that is phrased in positive terms.

a. Does not exhibit prejudices toward individuals of other socio-cultural groups.

b. Resists advertising and sales pressures designed to sway him from sound economic practices.

c. Avoids use of drugs and other substances which may be dangerous to his health.
Suggested Responses
for Module Two Self-Test

Please do not look at the Suggested Responses until you have attempted all the items on the Self-Test.
1. Below are several possible goal indicators for this goal: To help each student develop systematic reasoning ability. Some of them are not representative indicators of behavior one could observe in students who have achieved the goal, because they call for knowledge or skills above and beyond the ability to reason. Check the two goal indicators that best represent the goal.

- a. Can create many unique, original solutions to problems.
- b. Can locate much relevant information for analyzing problems and generating alternative solutions.
- c. Can infer practical solutions to problems by comparing them to other problems he knows how to solve.
- d. Can apply mathematical concepts to solutions of common practical problems.
- e. Can determine the most feasible course of action by inferring the logical consequences of alternative actions.

Note: Goal indicator a. calls for creative thinking ability; Goal Indicator b. calls for reference skills; and Goal Indicator d. calls for mathematical knowledge.

2. Below is a three-part elaboration of the following goal: To help each student master basic academic skills. The problem with the elaboration is that school-related rather than life-related outcomes are emphasized. Below each part of the elaboration, write one goal indicator, corresponding to all or part of the statement, that specifies a life-related outcome.

a. He should have developed a high level of reading skill. Reading is the foundation upon which all education is based. Development of reading should be related to other subjects and should include appreciation of good literature.

Some possible responses:

- Regularly reads periodical literature to keep informed about local, national, and international affairs.
- Obtains printed materials to look up specific information and to learn how to solve practical problems.
- Devotes leisure time to reading various types of literature for recreation and personal fulfillment.
- Can summarize the major themes underlying a work of literature as a whole.
b. He should have received instruction in language, spelling and composition. The importance of English, its correct use in spoken and written form, cannot be over-stressed. Language best serves communication when properly used, grammatically and expressively.

Some possible responses:

- Employs correct grammar and good pronunciation in his daily conversation.
- Can relate stories, personal experiences, and events with clarity, fluency, and expression.
- Can write neat, concise, and expressive social and business communications.
- Devotes leisure time to writing as a creative endeavor.

c. He should have developed an understanding of mathematics and its practical applications.

Some possible responses:

- Can maintain a balanced budget and a personal savings program.
- Makes cost comparisons of competing products before making purchases.
- Can correctly fill out personal income tax forms.
- Looks for quantitative evidence on which to base votes or decisions on issues of public significance.

3. For each pair of goal indicators listed below, check the one that specifies the more observable outcome:

_____ a. Understands the scientific method and the importance of measurement in science.

✓ b. Makes reasonable predictions based on known information, observations, and/or experimentation, and finds evidence to verify or disprove them.

_____ a. Appreciates the importance of observation in science, and sees the relationship between cause and effect.

✓ b. Is observant of conditions and events in his environment, and tries to formulate possible explanations for what he observes.
a. Takes personal measures to protect the environment and to avoid waste of natural resources.

b. Is aware of and concerned about man's responsibility for his environment.

4. The goal indicators listed below are unacceptable because they are not positive—they do not indicate behaviors that one can look for in those students who have achieved a goal. In the space provided below each statement, write a corresponding goal indicator that is phrased in positive terms.

a. Does not exhibit prejudices toward individuals of other socio-cultural groups.

Expresses respect for the dignity, welfare, and rights of every individual.

b. Resists advertising and sales pressures designed to sway him from sound economic practices.

Compares cost of competing products relative to quality before making purchases.

c. Avoids use of drugs and other substances which may be dangerous to his health.

Maintains his physical health by practicing sound dietary and nutritional habits.
THE MCUSD GOAL SETTING EFFORT

Episode Two

Since its last meeting, the MCUSD Instructional Planning Team has presented its new MCUSD Goal Statement to Superintendent Redford, explaining that the statement would be revised and expanded before submission to the School Board for formal adoption. Dr. Redford was enthusiastic over the team's work so far, and said he thought the team had done an admirable job of selecting goals that reflect MCUSD's educational philosophy. But he added that, since the goals by themselves do not fully communicate MCUSD's purposes to the district's constituents, he is most eager to see the expanded goal statement the team will be working on next.

For the next training session, the consultant who is coordinating the IPT's training on setting goals has brought in some additional materials to start the team off on the next step of the goal refinement process—that is, refining goals into goal indicators. He explains to the team:

"I felt that it might help you now to see the complete goal statements that the goal cards you worked with last time were based on. I think all three are fairly comprehensive, but they're different enough from one another to give you a sense of how goal statements may vary in style and content. Notice particularly the elaborations of the goals in each statement, since they may help you specify goal indicators for the goals you selected for MCUSD.

I've also brought in some materials on predictions for the year 2000 that have implications for student learning objectives. These predictions should sharpen your sense of what kind of world today's students will live in in the future, and help you specify goal indicators that reflect the district's concern to prepare them for that future."
INSTRUCTIONS FOR TEAM ACTIVITY

Refining Goals into Goal Indicators

With the other members of your Instructional Planning Team, you will now be refocusing one of your own goals into goal indicators. Since extensive community involvement at this point in the goal setting effort, although desirable, is not feasible for MCUSD, keep in mind that the goal indicators you specify should represent the viewpoints, not just of the IPT, but of all school-related groups. Proceed as follows:

1. Since you will have time to write goal indicators for only one goal, decide as a team which goal from your list of goals you want to work on.

2. Read the three examples of goal statements on pages 79-94. Since time is short, focus on the goal(s) in each statement that are similar to the goal you are working on, and to the elaborations of those goals.

3. Read the information about future predictions on pages 95-99. Pay particular attention to the information that seems to have implications for the goal you are working on.

4. Write the goal you are working on at the top of Worksheet 3 (pages 101-104). Then as a team, specify between five and fifteen goal indicators for that goal and have one member of your team write them on the worksheet.

5. Be sure that each of your goal indicators meets the four criteria listed along the right margin of the worksheet—BUT DON'T WRITE IN THOSE FOUR COLUMNS.

6. When you have finished writing your goal indicators, wait for instructions from the coordinator. Be prepared to exchange your team's copy of Worksheet 3 with another team, and to evaluate the goal indicators written by another team by answering the four questions along the right margin of Worksheet 3. You will have a chance to revise your own goal indicators after they have been evaluated by another team.
The five-page document which follows was taken from "Educational Goals and Objectives in California," prepared by the School Instruction Program Committee (Dr. George Muench, Chairman) for the California School Boards Association, 1969. It includes all the goals prefixed with the letter C (C-1 to C-18) which were on your goal cards, and is presented here as Sample Goal Statement No. 1 for use in this training unit.
PART III – EDUCATIONAL GOALS CATEGORIES

The attached list of goals categories and the existing similar goals represent the results of numerous meetings and discussions. It should be pointed out that this list was developed through a special contract with Dr. James Livingston, Sacramento State College, to make it possible to categorize goals presently possessed by California's school districts. When the list is finalized, information can be transferred from school district policy manuals to data cards and electronic data processing methods can be used to determine the status of the school district with respect to educational goals.

It is further noted that the attached document was developed from present school district policy statements, the list is expandable and it is the first phase of an even greater project of determining what the educational goals should be. The data bank developed through the use of the finalized list of goals categories will be valuable to school districts and to educational interest groups including the State Board of Education and the California Legislature.

It is important that a systematic method be used in doing the categorizing and that there is consensus among the various organizations that one system be used in California. Upon completion of Phase I, categorizing school districts' present goals, it will be possible to begin Phase II. The second phase will be concerned with what the goals of educational systems should be, methods of achieving the goals, and performance objectives leading to specific goal achievement.

The attached document is devised to be useful in helping complete Phase I. This is the list of categories that will be used in categorizing the educational goals of the school districts in California. These educational goals may be used by each school district as a checklist for establishing or revising current goal statements.
Educational Goals Categories

<table>
<thead>
<tr>
<th>GOAL CATEGORIES</th>
<th>Existing Similar Goals which are related to the general categories. These are not necessarily the complete statements appearing in California school districts’ manuals, but they do convey the thoughts contained therein.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCUMULATION OF KNOWLEDGE</td>
<td>A. Develop a general education background in oral and written English, in the use of numbers, natural sciences, reading, mathematics, and social sciences.</td>
</tr>
<tr>
<td></td>
<td>B. Develop a fund of information and concepts.</td>
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<tr>
<td></td>
<td>C. Develop a knowledge of political principles and their evolution.</td>
</tr>
<tr>
<td></td>
<td>D. Develop special interests and abilities.</td>
</tr>
<tr>
<td>SKILL TO ACQUIRE AND TRANSMIT KNOWLEDGE</td>
<td>A. Develop communicative skills and the abilities to communicate ideas effectively.</td>
</tr>
<tr>
<td></td>
<td>B. Develop skills in oral and written English, and mathematics.</td>
</tr>
<tr>
<td></td>
<td>C. Develop skills in the use of foreign languages.</td>
</tr>
<tr>
<td></td>
<td>D. Develop skills to communicate ideas and feelings effectively.</td>
</tr>
<tr>
<td>SKILL TO USE AND EVALUATE KNOWLEDGE</td>
<td>A. Develop ability to evaluate constructively and creatively.</td>
</tr>
<tr>
<td></td>
<td>B. Develop ability to use scientific methods.</td>
</tr>
<tr>
<td></td>
<td>C. Develop advanced quantitative reasoning.</td>
</tr>
<tr>
<td></td>
<td>D. Develop analytical methodology and logic.</td>
</tr>
<tr>
<td></td>
<td>E. Develop thought processes rather than abilities for rote memorization.</td>
</tr>
<tr>
<td>DESIRE FOR KNOWLEDGE AND CONTINUING EDUCATION</td>
<td>A. Develop intellectual curiosity and eagerness for lifelong learning.</td>
</tr>
<tr>
<td></td>
<td>B. Develop a positive attitude toward learning.</td>
</tr>
<tr>
<td></td>
<td>C. Develop a positive attitude toward continuing education.</td>
</tr>
<tr>
<td>ADAPTABILITY</td>
<td>A. Develop problem solving competence.</td>
</tr>
<tr>
<td></td>
<td>B. Develop the ability to adjust to a changing environment.</td>
</tr>
<tr>
<td></td>
<td>C. Develop an awareness of the expanding environment and develop abilities to cope with resulting problems.</td>
</tr>
<tr>
<td></td>
<td>D. Develop understanding of the past, identity with the present, and competence to meet the future.</td>
</tr>
<tr>
<td></td>
<td>E. Develop flexibility and appropriate attitudes toward change.</td>
</tr>
<tr>
<td></td>
<td>F. Develop ability to adjust to the changing demands of society.</td>
</tr>
</tbody>
</table>
PEER RELATIONSHIPS

A. Develop appreciation and respect for the worth and dignity of individuals.
B. Develop respect for individual worth and understanding of minority opinions and acceptance of major decisions.
C. Develop a cooperative attitude toward living and working with others.
D. Develop a cooperative attitude in daily relations with others.
E. Develop a sense of honor and respect for self and others.
F. Develop an awareness of the processes of individual relationships.

INDIVIDUAL RELATIONSHIPS WITH STATE AND LOCAL AGENCIES

A. Develop an understanding of the meaning of citizenship by precept and example.
B. Develop an awareness of civic rights and responsibilities.
C. Develop attitudes conducive to productive citizenship in a democracy.
D. Develop an attitude of respect for personal and public property.
E. Develop an understanding of the obligations and responsibilities of citizenship.

DEMOCRATIC PRINCIPLES AND LOYALTY

A. Develop loyalty to American democratic ideals.
B. Develop patriotism and loyalty to ideas of democracy.
C. Develop knowledge and appreciation of the rights and privileges in our democracy.
D. Develop an understanding of our American heritage.

INTER-RELATIONSHIPS OF PEOPLES

A. Develop respect for cultural heritages of other peoples of the world.
B. Develop an appreciation for and understanding of other people and other cultures.
C. Develop an understanding of political, economic, and social patterns of the rest of the world.
D. Develop awareness of the interdependence of races, creeds, nations and cultures.
E. Develop an awareness of the processes of group relationships.

PHYSICAL HEALTH AND SAFETY

A. Develop an understanding of good physical health and well being.
B. Establish sound personal health habits.
C. Foster correct health habits and health information.
D. Establish an effective individual physical fitness program.
E. Develop a concern for public health and safety.

MENTAL HEALTH

A. Develop a feeling of student pride in his achievements and progress.
B. Develop self-understanding and self-awareness.
C. Develop the student's feeling of positive self-worth, security, and self-assurance.
D. Develop an understanding of the importance of mental health and the importance of physical and mental well being.
CHARACTER DEVELOPMENT

A. Develop moral responsibility and a sound ethical and moral structure.
B. Develop an understanding of moral behavior.
C. Develop the student's capacity to discipline himself to work, study, and play constructively.
D. Develop a moral and ethical sense of values, goals, and processes of free society.
E. Develop standards of personal character and ideas.

AESTHETIC

A. Develop abilities for effective expression of ideas and cultural appreciation (fine arts).
B. Cultivate appreciation for beauty in various forms.
C. Develop the ability to enjoy aesthetic expression by others.
D. Develop creative self-expression through various media (art, music, writing, etc.).
E. Develop special talents in music, art, and literature.

AVOCATIONAL AND LEISURE

A. Develop ability to use leisure time productively.
B. Develop a positive attitude toward participation in a range of leisure time activities—physical, intellectual, and creative.
C. Develop appreciation and interests which will lead to wise and enjoyable use of leisure time.
D. Develop ability for constructive avocational pursuits.

CAREER AND OCCUPATIONAL SELECTION

B. Develop the student's ability to use counseling and guidance services which are designed to aid him in his consideration of courses of study related to his skills and interests.
C. Develop the ability to use information and guidance services related to the selection of a vocation.
D. Develop an appreciation of good workmanship and skills in performance.

CAREER AND OCCUPATIONAL PREPARATION

A. Develop abilities and skills needed for immediate employment.
B. Develop a knowledge of the practical facets of various vocational fields through an exploratory program.
C. Develop a knowledge of specific information about a particular vocation.
D. Develop an awareness of opportunities and requirements related to specific vocations.
E. Develop a knowledge of how and where to seek placement help upon completion of particular occupational preparation programs.

HOMEMAKING

A. Develop understanding and appreciation of the principles of living in the family group.
B. Develop attitudes conducive to acceptance of responsibilities as contributing family members.
C. Develop an awareness of future family responsibilities and achievement of skills in preparing to accept them.
ECONOMIC AND CONSUMER EFFICIENCY

A. Develop the student's economic competency and marketable skills.
B. Develop an understanding of economic principles.
C. Develop competence and understanding in personal buying, selling, and investment.
D. Develop an understanding of monetary exchange for goods and services and of the wise use of materials.
E. Develop an understanding of economic responsibility.
F. Develop an understanding of the values of natural and human resources.
The four-page document which follows was taken from "A Plan for Evaluating the Quality of Educational Programs in Pennsylvania," Educational Testing Service, Princeton, New Jersey, 1965. It includes all the goals prefixed with the letter P (P-1 to P-10) which were on your goal cards, and is presented here as Sample Goal Statement No. 2 for use in this training unit.
PROPOSED GOALS OF EDUCATION

The first step in judging the quality of educational programs is to decide on the purposes of education. What should children be and do and know as a consequence of having gone to school? What are the school's goals?

This question was high on the agenda of the Committee on Quality Education. The members of the Committee consulted existing statements of goals as a basis for working out their own statement. They wanted a set of goals that would reflect the problems society faces in the world of today. They wanted the statement of goals to be short enough to be discussed in public meetings, yet long enough and definite enough to suggest the kinds of pupil performance that would represent progress toward each goal.

The outcome of the Committee's thinking was first presented for public discussion by the Committee's Chairman, Mrs. Albert M. Greenfield, on March 4, 1965 at a conference in Harrisburg of 150 civic and professional leaders called together by Governor Scranton. The goals are as follows:

I. **Quality education should help every child acquire the greatest possible understanding of himself and an appreciation of his worthiness as a member of society.**

   Self-understanding should increase as the child matures. That is, he should become increasingly aware of his strengths and weaknesses, his values and interests and aspirations, so that the decisions he makes about his educational and occupational future will be informed, reasonable, and rational. He should be helped to know the strengths in himself that he should exploit and the weaknesses that he should try to overcome or that he must learn to live with.

   On the other hand, regardless of the level and pattern of his particular talents, the school experience should be such that it will strengthen, not damage, his self-esteem. The school should be operated in such a way that children at all levels of talent can achieve a growing awareness of their worth as persons in a society that claims to have an equality of concern for all its members.

II. **Quality education should help every child acquire understanding and appreciation of persons belonging to social, cultural, and ethnic groups different from his own.**

   The school experience should be such that the child will learn to respect and achieve an easy interaction with children who differ from
him in physical characteristics (e.g. skin color), in cultural traditions, economic status, religious beliefs, manner of speech, and degree of intellectual competence.

III. Quality education should help every child acquire to the fullest extent possible for him mastery of the basic skills in the use of words and numbers.

These basic skills fall into four broad categories: (1) the ability to acquire ideas through reading and listening (2) the ability to communicate ideas through writing and speaking (3) the ability to handle mathematical operations (4) the ability to reason logically and to respect evidence. The level of performance that can be reasonably expected in each of these areas will vary from child to child. However, since a civilized society depends crucially upon the verbal and mathematical literacy of its members, it is of profound importance that the level of expectation in these matters for any child shall not be underestimated or regarded as fixed and that every effort be made to give him the mastery he needs to function effectively.

IV. Quality education should help every child acquire a positive attitude toward school and toward the learning process.

The school experience should be such that the child finds the learning activities associated with it enjoyable and rewarding to the point that he is motivated to do well and to continue learning on his own initiative beyond the requirements of formal education. Everything possible should be done to ensure that the attitude of the teacher, the atmosphere of the school, and its physical condition shall contribute toward this end, so that the individual, both as a child and later as an adult, will hold education high among his values.

V. Quality education should help every child acquire the habits and attitudes associated with responsible citizenship.

Of first importance among such habits and attitudes are (1) loyalty to the fundamental principles of a free democratic society as expressed through a readiness to defend its institutions, to bring rational criticism to bear on their defects, and to work for changes leading to their improvement (2) effective participation in group activities by assuming the role of a leader or a follower as appropriate (3) appreciation and acceptance of the necessity for earning a living (4) acceptance of the basic ethical values that make group living possible--values characterized by such norms as honesty, fair dealing, and compassion for the less fortunate.

VI. Quality education should help every child acquire good health habits and an understanding of the conditions necessary for the maintenance of physical and emotional well-being.
In his own interest as well as in the interest of society at large, a child should know how to take care of himself and how to keep himself physically fit. He should know what the requirements are for physical and mental health and what practices, harmful to health, should be avoided. Mere knowledge of these matters, however, is not sufficient. In cases where the home has been deficient in encouraging the child to practice sound health habits, the school has an obligation to be aware of the situation and to see that opportunity for remedying the deficiency is provided.

VII. Quality education should give every child opportunity and encouragement to be creative in one or more fields of endeavor.

The notion of creativity has been variously defined. It is being used here to encompass worthwhile activities that a child initiates and pursues on his own -- activities having an outcome that is perceived by the child himself and by others as a contribution to some part of his world. Such activities can be included in a wide variety of fields, not only the sciences and the arts but also the organization of human affairs and the development and exercise of salable skills in the production of any of a host of practical things that enrich our way of living.

It is not to be expected that the creative behavior of school children will, except in very rare cases, lead to wholly original productions. What is expected is that many children, if given the chance, will become involved in exploring ideas and ways of doing things that are new and exciting within their own world. The school should make possible this kind of rewarding experience for all children, and should judge its success by its ability to evoke in children a flexible and creative approach to human affairs.

VIII. Quality education should help every child understand the opportunities open to him for preparing himself for a productive life and should enable him to take full advantage of these opportunities.

This goal implies that most children can profit from some form of education beyond high school, whether it be at a four-year college, a school of nursing, a community college, a technical institute, or the like. The youngster should be aware of these opportunities and seek out the particular kind of education best suited to his talents and interests. This goal also implies that the school will provide the child with the kind of guidance that will enable him to do so.

Furthermore, the school should help him discover the practically unlimited possibilities for continuing self-development both in the world of work and in the world of the mind so that he will be motivated to pursue excellence in all the forms of human endeavor that are appropriate for him.
IX. Quality education should help every child to understand and appreciate as much as he can of human achievement in the natural sciences, the social sciences, the humanities, and the arts.

Insofar as possible every child should gain from his school experience an increasing openness to the life of the mind and an increasing ability to find meaning for his own life in the heritage of the past and in the intellectual thrusts of the present age. He should achieve some understanding of the transforming conceptions of modern science. He should achieve increasing mastery over the basic principles of social and psychological sciences. He should develop a degree of sensitivity that enables him to differentiate the worthy from the worthless in the multifarious products of civilization as we know it -- books, motion pictures, radio, television, music, and the visual and performing arts, architecture, industrial design, and the like.

X. Quality education should help every child to prepare for a world of rapid change and unforeseeable demands in which continuing education throughout his adult life should be a normal expectation.

The explosion in knowledge, the impact of science on the economy, the almost unpredictable nature of the job market for both the short term and the long term, the increase in opportunity for leisure-time activities -- all these developments make it apparent that education, if it is to fulfill the life-long needs of the individual and the future needs of society, cannot stop at grade 12 or grade 14 or grade 16. Such continuing education may take many forms: it may be self-education, it may be formally organized retraining, it may be adult classes of a recreational nature. Whatever the form, it must be regarded as an essential of an individual's activity through his adult life if he is to keep up to date as a worker, as a citizen, and as a person.

* * *

The Harrisburg conference found these ten goals generally acceptable. When asked to rank the goals in order of importance, they were reluctant to do so. They felt that all ten were important goals of education and that none should be neglected. On the other hand, they felt that the statement of the goals needed further refinement and clearer definition. Similar reactions were obtained from educators, school directors, and parents in several local school districts.

WE RECOMMEND THAT THE FOREGOING TEN GOALS FORM THE TENTATIVE BASIS FOR THE DEVELOPMENT OF PROGRAMS FOR EVALUATING PUBLIC EDUCATION IN THE COMMONWEALTH OF PENNSYLVANIA.

WE FURTHER RECOMMEND THAT THE STATE BOARD OF EDUCATION SHOULD HOLD PERIODIC CONFERENCES WITH SCHOOL DIRECTORS, PROFESSIONAL EDUCATORS, AND REPRESENTATIVES OF THE GENERAL PUBLIC TO SECURE ADVICE ON REFINING, CLARIFYING, AND OTHERWISE IMPROVING THE STATEMENT OF GOALS SET FORTH ABOVE.
The three-page document which follows was taken from "Goals for Public Education in Texas," a report by the Subcommittee on Goals to the Governor's Committee on Public School Education, reproduced through the Courtesy of the State of Texas by OPERATION PEP: A State-wide Project to Prepare Educational Planners for California, December, 1968. It includes all the goals prefixed with the letter T (T-1 to T-6) which were on your goal cards, and is presented here as Sample Goal Statement No. 3 for use in this training unit.
SUGGESTED GOALS FOR PUBLIC EDUCATION IN TEXAS

Public education should help each individual to develop to the maximum of his capacity, and to function as a responsible member of a viable, democratic society. Public Education in Texas should help each individual to achieve:

(1) **Intellectual Discipline.** The schools should:

- Provide all children with knowledge of the traditionally accepted fundamentals, such as reading, writing and arithmetic in the early elementary grades, accompanied by studies in higher mathematics, science, history and English as they progress through the upper grades.

- Help each child to develop the power to think constructively, to solve problems, to reason independently, and to accept responsibility for self-evaluation and continuing self-instruction.

- Help each child gain access to the accumulated culture and knowledge of man.

(2) **Economic and Vocational Competence.** The public schools should:

- Help all students understand how to function effectively in the American economic system.

- Provide every student with usable vocational skills which will equip him to find employment in the event he finds it impracticable to continue his education.

- Offer guidance and counseling to help every student decide what he should do upon completion of high school.

(3) **Citizenship and Civic Responsibility.** The public schools should:

- Provide for all children citizenship education opportunities and experiences which emphasize the American heritage and the responsibilities...
and privileges of citizenship.

- Help equip each child for intelligent participation in the democratic processes through which this country is governed.

- Teach each child to understand the relationship between the United States and other nations of the world.

(4) Competence in Human and Social Relations. The public schools should:

- Assist each child in his efforts to make a place for himself in the community and to the larger society of the state and nation.

- Help to develop in all children a respect for the rights of others as individuals and as groups, and to understand the requirements that a viable society demands of the individual.

(5) Moral and Ethical Values. The public schools should:

- Assist in the development of moral and spiritual values, ethical standards of conduct, and basic integrity.

(6) Self-Realization and Mental and Physical Health. The public schools should:

- Provide educational programs which take into account individual differences.

- Help each child attain the optimum growth and development within his capacity.

- Help each child to attain and preserve physical and mental health, to develop a sense of aesthetic appreciation, and to deal constructively with the psychological tensions inherent in continuing change and adaptation.

These Goals for Public Education in Texas are tentatively recommended, pending further research and evaluation on the status and trends of public education in our State. They should serve as yardsticks for measuring the attainments of our educational system and targets for our long-range planning.
As the research progresses, the tentative goals should be elaborated, perhaps modified, and finally offered for public judgment and formal adoption. To implement these basic goals, specific objectives and means for attaining them will be determined and incorporated in a long-range plan for making Texas a leader in the field of public education.
The four-page document which follows is an abridgement of "LEARNING
OBJECTIVES FOR THE YEAR 2000, A Synopsis of Expert Opinion on the
World of 1975-2000 and Its Implications for Ten Basic Educational Goals,"
by M. John Rand, Fenwick English Director of Projects, Temple City
Unified School District, Temple City, California, August, 1968. The
developers selected from the 114 predictions presented in the Temple
City document 20 predictions that appear most relevant to the present
training activity. The complete reference list is included, and the
reference numbers following each prediction are those given in the
original article. Used with permission of the author.
1. People will be more intellectually committed to their jobs and will demand more involvement, participation, and autonomy in their work. (1)

2. The development of the mind is absolutely essential for survival in the world ahead. The future lies with science, education and technology, in the order given. The key word for the future is "change." (7)

3. Meritocracy makes a wide range of career choices available to the student. Many new kinds of careers will be legitimized by the year 2000. (1)

4. The wheel as a means of public transport for long distances will, according to RAND Corporation, be replaced by a ballistic rocket capable of reaching any place on earth in forty minutes. (4)

5. Population in the United States will nearly double by 2000. The population will continue to shift to the west and southwest and California will remain the largest state. Five-sixths of the population will be urban dwellers and occupy two per cent of the land. Half the population will be concentrated in twelve states which contain ten per cent of the land area. Nearly one-half of all Americans will live within one hundred miles of the ocean. This will necessitate the use of bars, offshore islands, and the building of sand spits. (1, 9)

6. Theologians will bear a major responsibility to adapt codes of ethics and standards out of logic and scientific knowledge. This growing movement will be called scientific humanism. (8)

7. The future universities and colleges will be intellectually far more rigorous, will be shorn of "snap" courses and bureaucratic faculties. The students, instead of being drawn predominantly from the upper middle class without consideration of intellectual ability, will consist of the most able intellectually from all class status. (7)

8. There will be an ever-widening gap between the supply and demand for skilled technical manpower. (13)

9. The majority of working people will be technicians or maintenance personnel. The highly-educated will be engaged in research and development and leadership positions that require problem-solving and decision-making. (2, 6, 7)

10. There will be a total decline in graduates specializing in business and commerce. There will be great increases in the number of teachers, engineers, foreign language experts, the health professions, scientific and technical personnel, and psychologists. (7)

11. The most distinctive character of our society is, and will become even more so, education. Within fifteen years two-thirds of the metropolitan population will have attended college. The experienced professional will go back to school for advanced training every two to three years. The survival of a firm will depend upon proper exploitation of brain power. (1)

12. The concept of student salary, starting possibly at 14, and increasing with age, payable to all students attending high school or university. This would possibly cut the drop-out rate. (16)
13. Intellectual institutions as we know them may change drastically. The direct "piping" into the home of information and communication by means of sophisticated transmission instruments will be a contributing factor. (4)

14. Education will concentrate on encouraging people to develop their own intellectual interests, not just on preparation for materially-productive or non-productive work. (6)

15. Greater knowledge and understanding of how to minimize the frequent stunting and distorting of personality in children which today produces many unhappy and anti-social individuals. (1)

16. In the year 2000 it will be much less feasible to talk of national planning for human services without specific reference to the international community. (1)

17. Greatly advanced methods of food production, including extraction of foods from the ocean, recovery of submerged land, creation of artificial environments, synthesis from fossil fuels, and improved weather forecasting, will be developed. (6, 25)

18. Labor forces will succumb to automation. Hard and heavy labor, distasteful and menial tasks will be done by robots, computers, and other forms of mechanical means. Men will have more leisure time. The arts will surely enjoy a great revival. The forum and gymnasium may bloom again. (2, 6, 7)

19. Automation will be looked upon as an "unmixed blessing" rather than as a menace. A higher standard of living, increased employment in the service industries with new markets, hand labor reduced to a minimum—all due to automation. (9)

20. Nuclear sources will produce abundant, clean, cheap energy providing the basis for a much higher standard of consumption. More than half of all power plants now being planned by U.S. utilities will be nuclear powered. (1, 4, 6, 7, 17)
References for 'World B y The Year 2000" section


8. Rosenfeld, Albert, 'Will Man Direct His Own Evolution?' (Life article, October 1, 1965).


11. Skinner, B. F., 'Walden Two'.


14. Mertz, Dr. and Oliver Nelson, Jr., Science Magazine, July 17, 1964 -- an article.


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Module Three
SCREENING SETS OF GOAL INDICATORS

Overview

So far you have derived goals for a goal statement, and refined at least one goal into a number of goal indicators that individually meet certain criteria. In Module Three, you will be given three criteria for screening a set of goal indicators to ensure adequate coverage of a goal. Then your team will screen all the goal indicators you wrote during Module Two to determine whether, as a set, they adequately cover the goal, and will make any necessary changes.

Once you finish Module Three you will be able to:

1. Specify criteria for screening sets of goal indicators for adequate coverage of the goal.

2. Revise sample goal indicators that do not meet each criterion.

3. Screen a set of goal indicators for adequate coverage of the goal, and rewrite goal indicators, write additional ones, or eliminate redundant ones, if necessary.

I. Ensuring Adequate Coverage of the Goal

It would be possible to generate hundreds of goal indicators for a single goal, all of which would meet the necessary criteria for well-written goal indicators. Such an extensive elaboration of each goal in a district's goal statement would obviously be unwieldy, however, both for guiding staff in making decisions about the instructional program, and for communicating the district's instructional purposes to the community. Selectivity is essential. But how can instructional planners be sure that the goal indicators they select are the most appropriate ones?

This module discusses three criteria for screening sets of goal indicators to ensure adequate coverage of the goal:

1. THE SET SHOULD INCLUDE GOAL INDICATORS FOR ALL IMPORTANT AREAS OF BEHAVIOR RELATED TO THE GOAL.

2. THE SET SHOULD NOT INCLUDE ANY REDUNDANT GOAL INDICATORS.

3. ALL THE GOAL INDICATORS IN THE SET SHOULD BE OF SIMILAR SPECIFICITY.

If your goal indicators as a set do not meet one or more of these criteria, you may have to: a) specify additional goal indicators for any neglected areas of behavior related to the goal, b) eliminate redundant goal indicators, and/or c) rewrite or combine goal indicators that are either overly broad or overly specific.
During the training you and your team will have only limited time to revise your set of goal indicators to better meet these criteria. However, in real life, instructional planners should never regard a set of goal indicators as "final," even if they have received formal approval. Goal indicators must be revised as the student population changes, as staff turnover and modifications of the instructional program occur, or as the conditions of life change—which may occur very rapidly according to the predictions you read earlier.

II. The Set Should Include Goal Indicators for All Important Areas of Behavior Related to the Goal

The most important step in screening a set of goal indicators for adequate coverage of the goal is to check that no important areas of behavior related to the goal have been omitted. All points of view that may be held by members of school-related groups should be taken into consideration.

Broad goals are subject to several different interpretations. Instructional planners must be sure that the set of goal indicators they select includes indicators representing all the major interpretations of the goal, not just the ones they themselves consider important. Module Four will discuss procedures by which priorities can then be assigned to the various goal indicators on the basis of which of the possible interpretations of the goal school-related groups consider most important for the schools to achieve.

For example, the goal "To help each student maintain mental and physical health" covers several different areas of behavior, including:

a) understanding of emotional self,
b) understanding of physical self,
c) understanding of sex hygiene,
d) use of accepted hygienic and nutritional practices,
e) use of accepted safety and first aid practices, and
f) physical fitness.

Each of these aspects of the goal should be reflected in the set of goal indicators.

Of course, you can never be certain that you have thought of "everything" important. Verifying adequate coverage of the goal is most essential in cases where school-related groups have not been deeply involved in the goal setting process up to this point, because in this case school planners are less likely to understand what areas of behavior are considered important by various members of the community. At the same time that you assess school-related groups' opinions of the importance of the goal indicators you have selected, you can ask them to indicate any gaps in the goal statement and/or supply any additional goal indicators which they consider desirable. But in cases where members of major school-related groups have been involved throughout the goal setting process, the initial set of goal indicators will probably be about as comprehensive as can be expected.