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Through the generosity of the family of Dr. Mauritz Johnson, we are pleased to now have the opportunity to share his unpublished papers, books, and articles. We will continue to add to the collection occasionally, as scanning and time permit.

With the exception of *Intentionality in Education*, which was previously edited and published, these papers are as they have been found on Johnson's computer and in his files. Please accept our apologies for any imperfections.

Mauritz Johnson was one of the most important figures in late 20th century education. As teacher, administrator, scholar and theoretician he fostered clarity and provided unique tools for a scientific approach to educational problems. We are proud to provide access to his works and serve as a meeting point for those who are interested in promulgating his legacy.

Dr. Paul Zachos
Director, ACASE



INTENTIONS & OUTCOMES



**A CITIZENS' GUIDE TO
ASSESSING SCHOOL PROGRAMS**

By Mauritz Johnson



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1

The Anatomy of a Program

Normally, this first paragraph would appear in a foreword or preface or introduction, where it might all too easily be missed by many readers. Perhaps right here in Paragraph 1 of Chapter 1 is the best place to make sure every reader understands what this book is **not** about. It does **not** suggest what a school program should include or how it should be taught. It does **not** advocate any new, innovative approach to schooling, nor does it argue for a return to “the good old days.” Instead, the focus is on how to go about assessing whatever program now exists, and this first chapter is devoted to making sure that all readers know just what a program is. Think of it as a brief lesson in program anatomy.

Phases , Aspects , and Purpose

Formal education is a deliberate undertaking. Whether in an institution, like a school or college, or in another setting, such as business or the military, an educational program entails intentions and efforts to fulfill them. It has **three phases**, each having **two aspects (sides)**. We can refer to the phases of a program as:

(1) **Instruction**, (2) **Learning**, and (3) **Development**. Each phase has a **Planning** aspect (side), in which plans are formulated, and an **Operation** aspect (side), in which plans are implemented.

An instructional program’s overall **purpose** is to **promote students’ optimum development through appropriate learning facilitated by instruction.** A particular program may emphasize the **personal**, the **social**, the **economic**, or the **academic** facets of development, but all educational effects boil down to changes in an **individual** due to learning.

The Two Aspects of the Three Program Phases

In efforts to accomplish this purpose, the **planning** aspects of the **three phases** are as follows::

- Educational **GOALS** are the planning aspect of the **Development** phase; they specify which student characteristics are optimum for the program's purposes;
- the **CURRICULUM** is the planning side of the **Learning** phase, identifying the specific **learning** outcomes that are deemed most likely to promote the development called for by the Goals, and
- as the name implies, **INSTRUCTIONAL PLANS**, dealing with effective provisions for bringing about that learning, represent the planning aspect of the **Instruction** phase.

The **planning** of instruction [**I**] must be preceded by the planning of learning [**L**], which in turn must follow the planning of development [**D**]. Thus, in the **planning** aspect, the order of the three phases is **D -> L -> I**. In program **operation**, however, the opposite order applies. **Instruction** must be carried out before there can be **learning**, which in turn is a necessary condition for students' **development**. The order on the **operation** side, therefore, is: **I -> L -> D**.

The Three Phases of the Two Program Aspects

One can look at a program as two aspects in three phases or three phases with two aspects. For emphasis, this section will repeat the previous one for the other angle. It is clear that each of the three phases (**D, L, I**) has two aspects -- a **planning** aspect and an **operational** aspect. In the world of planning, **intentions** are formulated; in the operational world, the plans are implemented and the intentions are realized.

The kinds of **development** intended to be brought about in students are known as the program's **GOALS**. The term **CURRICULUM** refers to the **intended learning outcomes** chosen to achieve those goals. Goal statements (**G**) and curriculum documents (**C**) are both **PRODUCT plans**, defining intended **outcomes** at two levels. To achieve these outcomes, a **PROCESS plan** is needed, one that defines what teachers and students must do to realize the intended products.

That process plan, whether for a course, a unit, or a lesson, may be called an **INSTRUCTIONAL PLAN (IP)**.

On the operation side, we call the process of implementing these plans, **instruction (I)**. This process does not, of course, produce learning directly. What it does is induce responses by students that are effective in bringing about **learning (L)** and promoting **development (D)**.

Sometimes students making the desired responses are said to be having “learning experiences.” But an “experience” is a very personal phenomenon that is not easily detectable by observers. We tend to assume that one has occurred when we observe the

student engage in a particular **activity** dealing with appropriate **content**. (This “content” need not itself be intended to be learned; all that is required is that it be **instrumental** to achieving the intended learning, e.g., one isn’t expected to remember every column of figures encountered in learning addition.)

Hence, when a good instructional plan (**IP**) is implemented in instruction (**I**), the resulting **teaching** behavior leads students to engage in **activities** with **instrumental content** that bring about intended learning that contributes to student development of the sort desired. Figure 1-1 summarizes the points made in the two last sections.

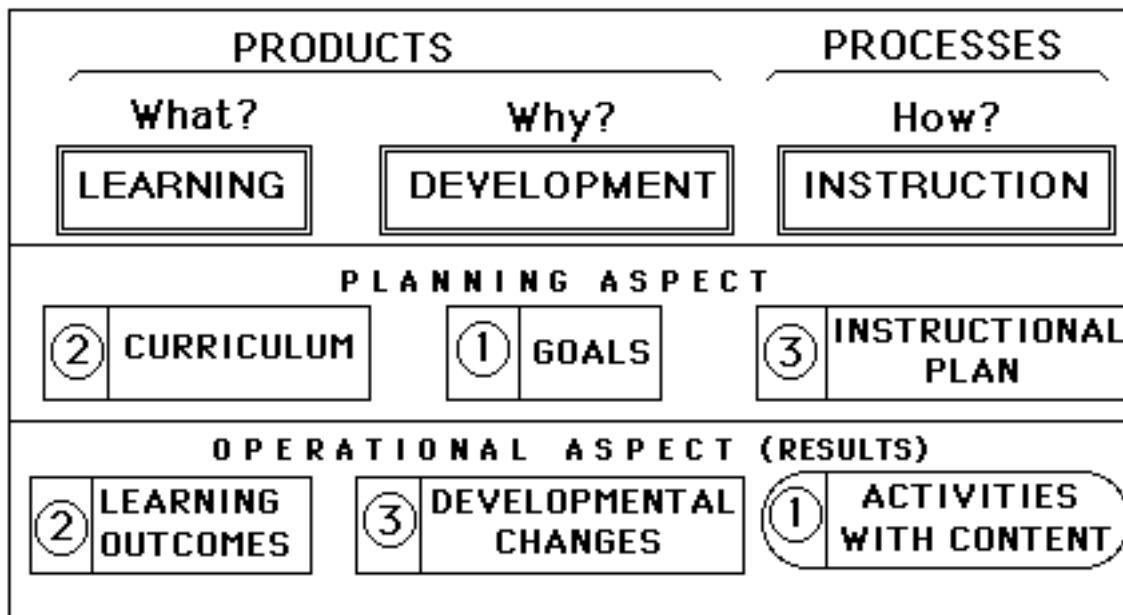


Fig. 1 - 1. The names and order of the three program phases in each of the two aspects

Plans and Planning

Some further comments on the planning aspect might be useful at this point. (Chapter 9 will examine planning in more detail.)

- Planning is a **process**. It results in a **product**.
- The product of planning is a **plan**.
- A plan may prescribe either an **intended action** or an **intended outcome**.
- A plan that prescribes particular actions is a **process plan**.

Likewise, a plan that anticipates certain outcomes can be called a **product plan**. (See Fig. 1-2.)

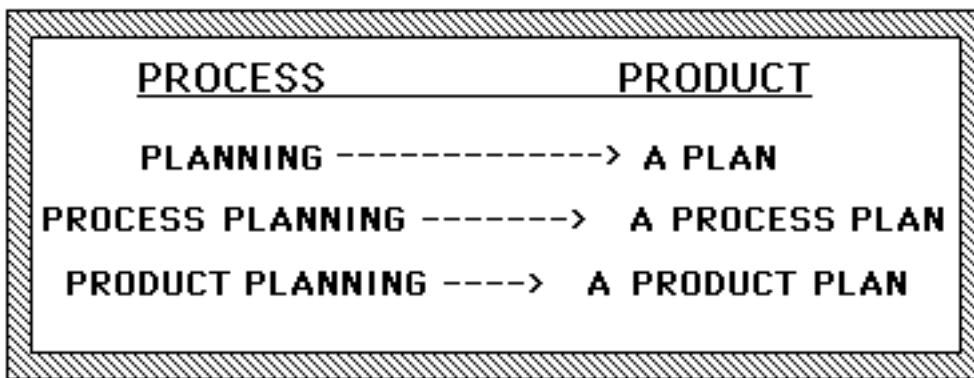


Fig. 1-2. Process planning is one kind of planning process. Process plans tell what to do; product plans describe intended results of productive processes.

Product plans are like menus that tell what dishes are to be prepared; process plans are like recipes that explain how to prepare the dishes. Blueprints are product plans that show what is to be constructed; construction schedules are process plans outlining how the desired product will be created. Educational programs require both product plans and process plans; **product** plans always come **first**. A good way to start examining a school program is to **ask to see a product plan**, a description of either

the program's goals or its intended learning outcomes -- the changes to be brought about in students. Fig. 1-3 may help in keeping the two aspects and three program phases in mind.

2

Program Assessment

Recall that an instructional program is a very deliberate undertaking that is intended to produce certain results. Each program has an operational aspect that is preceded by a planning aspect and both aspects have three phases. The three phases of **planning** concern goals, curriculum, and instructional plans. The corresponding **operational** phases pertain to student development, learning outcomes, and instruction. Now we ask what is meant by program assessment?

The Idea of Assessment

As an activity carried out in accordance with a set of rules, the assessment of a school program is a sort of “game,” though one in which there are no losers.. It seems appropriate, therefore, that we begin to look at this “game” by considering what its general idea is and on what premises it rests.

The idea of **SCHOOL PROGRAM ASSESSMENT** is to:

- (1) identify a particular program's **intended** results,
- (2) discover what its **actual** results are, and then
- (3) **compare** those results with the intentions.

Underlying our assessment “game” and also this booklet are the following assumptions:

1. That assuring the quality of school programs is an important responsibility.of parents and citizens
2. That those of us who accept this responsibility need to know not only **how an educational program works, but also how to assess one** -- what questions to ask of school personnel and what to look for in the school setting

3. That our chief concerns in examining a program should be:
- Whether the administrators and teachers can explain to us clearly what they are trying to **accomplish** -- their program's **intended outcomes**
 - Whether we agree that the goals they seek seem to befit their mission, their intended learning outcomes are apparently consistent with their goals, and their instructional plans appear to be suitable for both.
 - Whether reliable evidence of what is **actually** occurring and being accomplished in the program is available or could be obtained
 - How these results **compare** with the intentions

Overview of Program Assessment

Intentions are expressed in **plans**. If we have the plans for a program and are satisfied with them, and we also have credible reports on the program's **results**, our task is straightforward: **compare** the **results** with the **plans** -- **outcomes** with **intentions**.

If written plans don't exist or if we consider the existing ones unsatisfactory, it will be necessary for us to have acceptable plans formulated. If no reports on results are available, or if we find that the available reports are not acceptable for our purposes, we must arrange for further observation of the results.

If a school program is satisfactory, some would say we should leave it alone ("if it ain't broke, don't fix it"), while others might say we should try to make it even better than it is. On the other hand, if a program does have shortcomings, we probably all agree that we ought to try to correct them, rather than just complain about the poor program or give up on it.

Before any program can be fixed, however, the problem must be pinpointed. Physicians call this step **diagnosis**; to mechanics it might be **troubleshooting**. Both would use a very systematic approach. We should be at least as painstaking in examining a school program.

How can we tell whether or not a program is "satisfactory"? What can we do to improve an already good program? How can we find out why a program is not as good as it ought to be? And how can we try to fix it?

Although they've been through school themselves, many people do not know how to look at a school program and pinpoint problems in it.

Even professional educators sometimes find they are too close to the program to detect shortcomings. This booklet is intended as a guide for anyone interested in playing the game of school program assessment.

Assessment Stages

There are three stages of program assessment, corresponding to the three program phases we considered in Chapter 1 (Fig. 2-1):

STAGE	COMPARE	AGAINST
1	STUDENT DEVELOPMENT	GOALS Intended Student Development
2	LEARNING OUTCOMES	CURRICULUM Intended Learning Outcomes
3	INSTRUCTION	INSTRUCTIONAL PLAN

Fig. 2-1. The three stages of program assessment.

The three statements in Fig. 2-1 can be reduced to symbols as follows:

If D = students' DEVELOPMENT and G = program GOALS;
and <-> = compare; then,

$$\text{Stage 1} = G \leftrightarrow D$$

If C = CURRICULUM (Intended Learning Outcomes); and
L = actual LEARNING OUTCOMES; then,

$$\text{Stage 2} = C \leftrightarrow L.$$

If IP = INSTRUCTIONAL PLAN and I = INSTRUCTION;
then, Stage 3 = IP <-> I.

Got it? Maybe a diagram would be helpful in visualizing these complicated relationships. Study Fig. 2-2 and try to envision the checking of results against plans at each of the three stages.

- Look for: > two program aspects: **planning** and **operation**
- > three program **planning** phases: G, C, IP;
- > three **operation** phases: I, L, D;
- > three **assessment** stages: G<->D, C<->L, IP<->I.

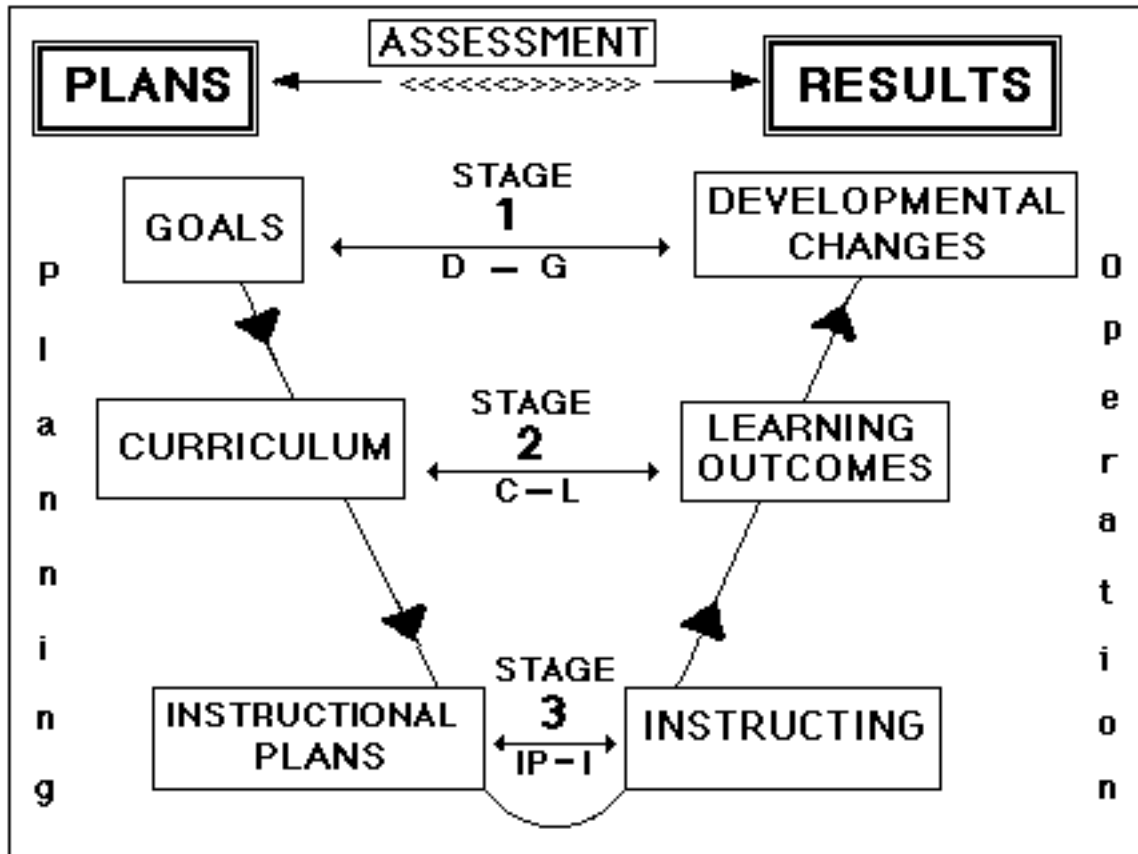


Fig. 2-2. Three stages of program assessment at three phases and two program aspects: planning and operation (the preparation and implementation of plans).

3

Assessment Steps

We have seen that every school program has three phases: the goal phase, concerned with students' development; the curriculum phase, concerned with their learning; and the instruction phase, in which the learning and development are fostered through students' interaction with selected content. In each phase, two aspects are of interest to us. In one aspect, plans are formulated; in the other, they are implemented and results are produced. Corresponding to each program phase there is an assessment stage, and each stage can entail as many as eleven steps, a total of 33 for the program as a whole.

Each of these assessment steps requires us to engage in one of three activities:

- >> DETERMINE
- >> DECIDE
- >> DO

There are several pathways through the eleven steps at each stage, depending on what we determine or decide at each point. The minimum required is five steps; it is possible, though, that we will need all eleven. Here are descriptions of each of the eleven steps. The possible routes through them will be explained in the next chapter.

Steps on the Planning Side

Steps 1 through 5 concern the planning aspect of the program; steps 6 through 10 pertain to the operation side, where the plans are implemented; Step 11 relates the two sides. Our first step at any stage is to determine whether or not a written program plan exists:

Step 1 -- DETERMINE: Are there appropriate product plans and process plans for the program?

If plans do exist, we continue with Step 2.



Step 2 -- DECIDE: Are the available product plans satisfactory for our purposes?



Are they expressed in terms of changes in students, are the intended outcomes expressed appropriately, and is the list complete? In the case of a process plan, does it indicate how those outcomes are to be achieved?

“Satisfactory for our purposes” does not mean that we think a particular instructional plan, curriculum, or list of goals is “good.” We are not judging its **content**, merely its **format**. We can’t use a so-called list of goals that is not expressed as student characteristics to be developed, or an alleged curriculum that does not state intended learning outcomes, or an instructional plan that does not specify learning activities and their content.

When Step 1 reveals that a plan is **NOT available** or we judge in Step 2 that the available one is an **unsatisfactory** basis for assessing program results, we then have to see if we can get an acceptable one developed. For this purpose, what is needed is a **managerial plan** for program planning, hence Step 3.

Step 3 -- DETERMINE: Are there any managerial (administrative) plans that will guide program planning?



If our inquiry in Step 3 reveals that the school does **not** have such managerial plans, then we need to see that they get formulated.

Step 4 -- DO: Urge that managerial plans be created.



These should include:

1) a managerial **product** plan indicating what the **program** plan is to **comprise**, from what **source** its components are to be drawn, what **criteria** should be applied in selecting them, and how they are to be **arranged** to form the plan, as well as

2) a managerial **process** plan specifying the **conditions** under which the **program** plan is to be formulated -- who is to be responsible for it, and when, how, and where they are to do the planning.

Keep in mind that we are talking here about two different kinds of plans: the **program** plans and the **managerial** plans for creating those

program plans. Whether the managerial plans for program planning were available in Step 3 or were newly created in Step 4, the next step is to have them implemented, i.e., to prepare program plans in accordance with them.

Step 5 -- DO: Urge that the required program plans be formulated in accordance with the managerial plans.



Depending on our status in assessing the program, the verb “urge” in Steps 4 and 5 might be replaced by “request,” “demand,” “insist,” “ask,” “beg,” or “suggest.”

---> But, remember, it is impossible to assess a program without program plans, and it is impossible to form such plans without the guidance of managerial plans. <---

Figure 3-1 might help clarify or reinforce the foregoing discussion of Steps 1 through 5. Try to interpret it, but if it merely confuses you, skip it and consider steps 6 through 10 on the operation side where the plans are implemented.

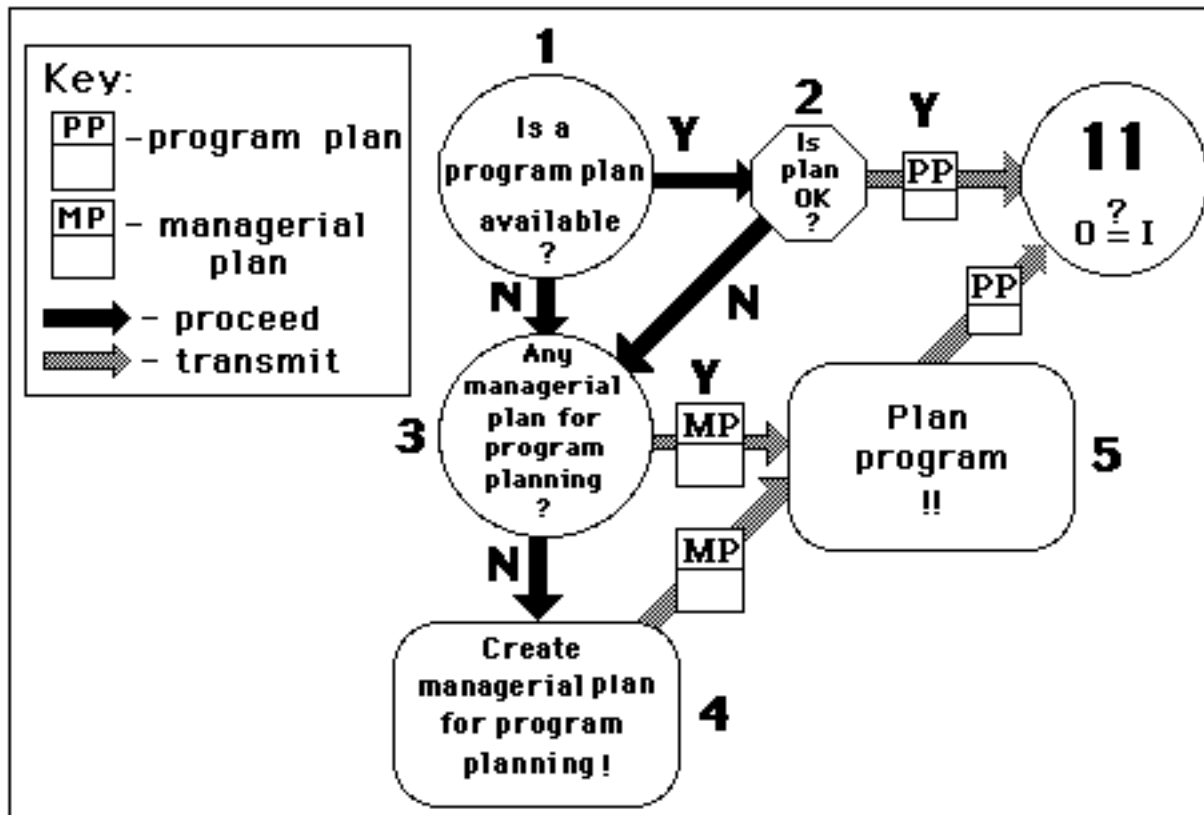


Fig. 3-1. Assessment Steps on the Program's Planning Side.

Steps on the Operational Side

On this side, we are not looking for plans, but for reports on the results of implementing the plans. But Steps 6 to 10 are analogous to the Steps 1 through 5 that we have just considered.

Step 6 -- DETERMINE: Are there any reports providing evidence of what actually took place in instruction and what its outcomes were?



If so, we want to examine them to see if we can use them.

Step 7 -- DECIDE: Are the reports satisfactory for our purposes -- was there an adequate sample of learning experiences and were their outcomes appropriately observed?



If the answer at either Step 6 or 7 is negative, then we need to have the results observed and reported. To assure that the observation is done properly, once again we must have **managerial** plans.

Step 8 -- DETERMINE: Are there any managerial plans on hand for observing and reporting the results of implementing program plans?



If we find in Step 8 that there are **no managerial plans** for creating or selecting, as well as applying, the needed observation instruments or procedures, Step 9 becomes necessary

Step 9 -- DO: Request that such managerial plans be formulated.



Once the instruments are available, from either Step 8 or 9, we must see that they are administered to provide the reports of program results we need for our final assessment step.

Step 10 -- DO: Request that the managerial plans be carried out to observe and report on program procedures and results.



This having been done, we now have reports indicating what results were observed when plans were implemented. Our final step is to carry out our main task of comparing the described results from Step 7 or 10 with the stated plans from Step 2 or 5.

First, however, examine Fig. 3-2 carefully, comparing it with Fig. 3-1 by noting the similarities and differences.

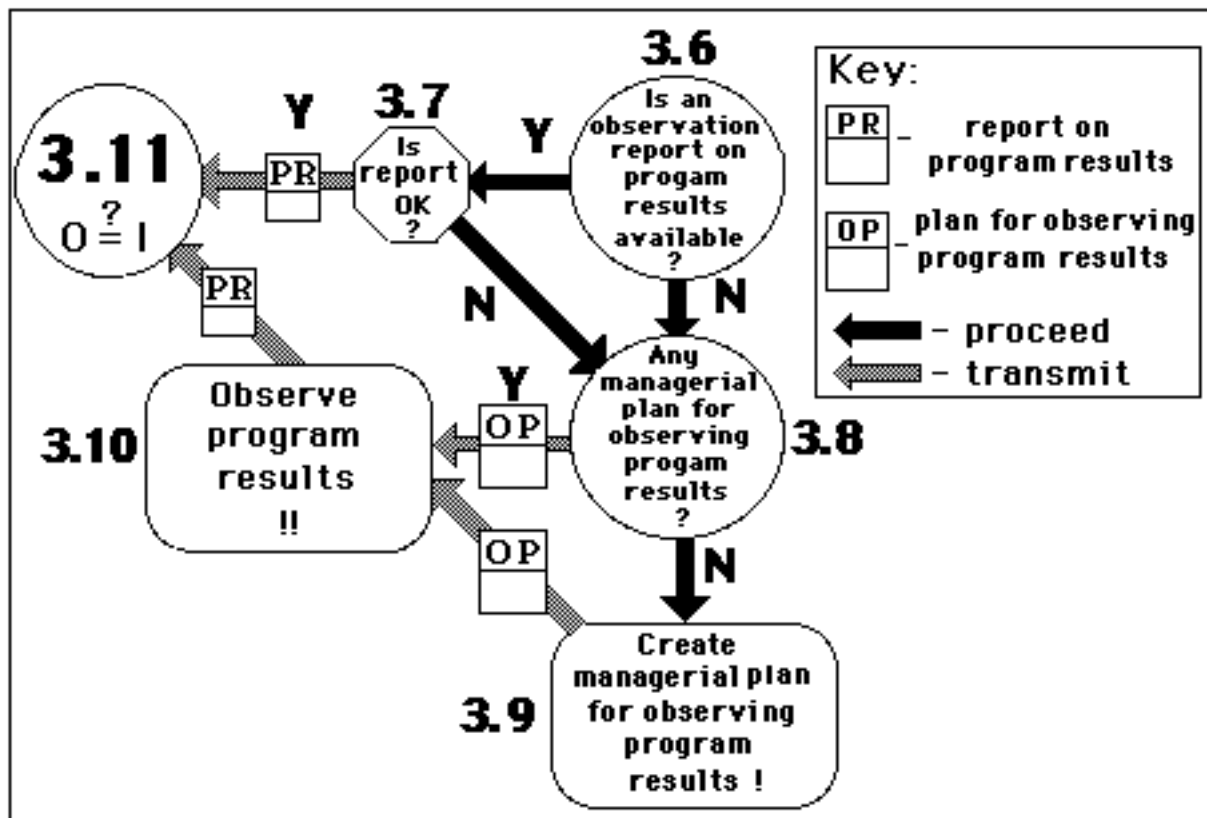


Fig. 3-2. Assessment Steps on the Operational Side of Program.

Comparing Results with Plans

Step 11 -- DECIDE: Did the instruction take place as planned and were the intended outcomes achieved (Step 7 or 10 vs. Step 2 or 5).



We have just traced through eleven general assessment steps.

With appropriate modification, all of them apply at each of the three assessment stages. At **Stage 3**, our question is whether the **instruction**, as observed, followed the **instructional plan**, while at **Stage 2**, it is whether the **observed learning outcomes** corresponded with the **intended learning outcomes** specified in the curriculum, and at **Stage 1**, our concern is whether the evidence we have of **students' development** conforms with the **program goals**.

Fig. 3-3 provides a different way of visualizing the eleven steps in program assessment. We shall encounter them all again at each program stage (Chapters 6-8).

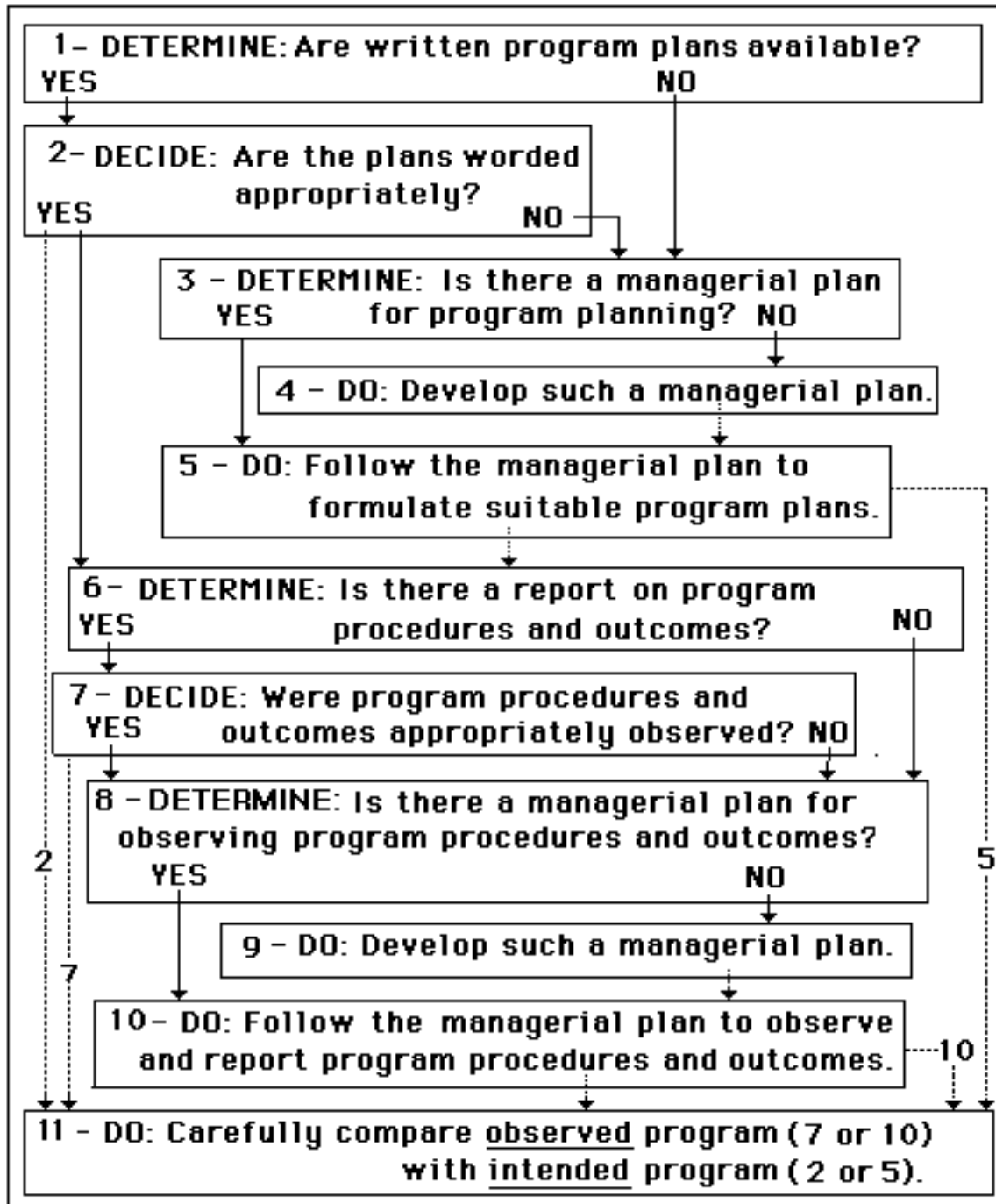


Fig. 3-3. The Eleven Steps in Program Assessment, involving DETERMINING, DECIDING, and DOING.

4

Paths through the Steps

Our last chart suggested that there are a number of pathways leading from Step 1 to Step 11, depending of the “Yes” and “No” answers we get to our questions. Actually, there are exactly twenty possible routes, depending on the circumstances. By taking a look at each of the paths, you should become increasingly familiar with all of the steps.

It should be obvious that the amount of work we have to do inspecting a program depends a lot on how much **documentation** is already available to us regarding it. The eleven steps at each of the three stages require us to carry out the three "D's" we encountered earlier: **determine, decide, and do**.

We must **determine** whether the school has (1) program **plans** and (6) program **reports** available, and if not, we may also have to **determine** whether they have **managerial** plans (3) for planning and (8) for observing.

We **decide** at steps (2) and (7) whether their existing plans and reports are OK for our use. This decision is in reality an assessment in itself -- we assess the adequacy of the program plans or observation reports.

When neither the plans nor the reports, or only one of them, is satisfactory, what we may have to **do** (or have done) is apply managerial

plans in (5) formulating program plans and/or observing results. If managerial plans are lacking in (3) and (8), we must first have them developed in (4) and (9). And of course the one thing we always have to **do** in (11) is **compare results with plans**, whether it be 7 vs. 2, or 7 vs. 5, or 10 vs. 2, or 10 vs. 5.

The Shortest Route

If all goes well, we need only five of the eleven steps. This happens when plans and observation reports are both available (at Steps 1 and 6) and we decide that both are in good shape for our assessment purposes (at Steps 2 and 7). With both intended and actual outcomes in hand, we can proceed directly to Step 11 and make the comparison., as in Figure 4-1:

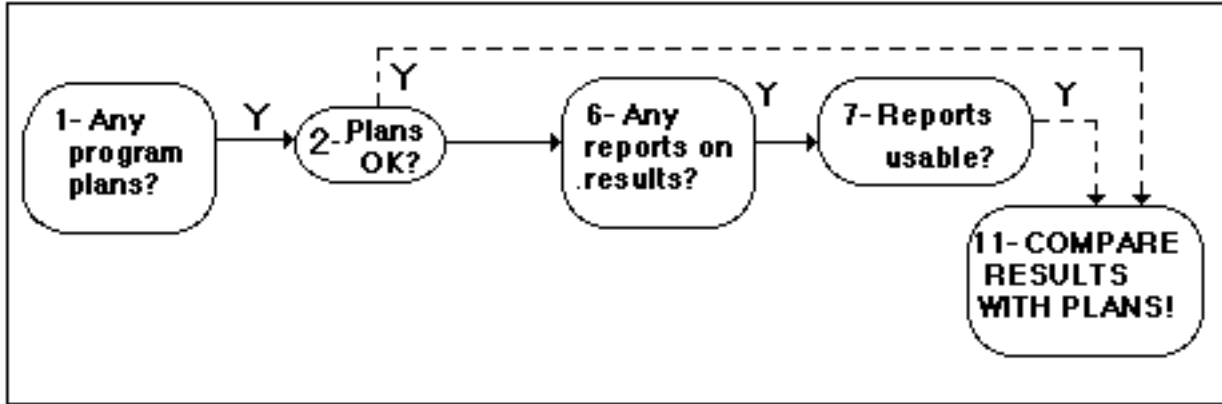


Fig. 4-1. The most direct assessment route needs only five steps in all.

The Longest Route

In the worst case scenario, we have to go through all eleven steps. This case arises when we get **negative** answers to every single “DETERMINE” step, as well as when we “DECIDE” **negatively** in Steps 2 and 7, even though Steps 1 and 6 are “Yes.” Prove it to yourself by examining Figure 4-2 carefully:

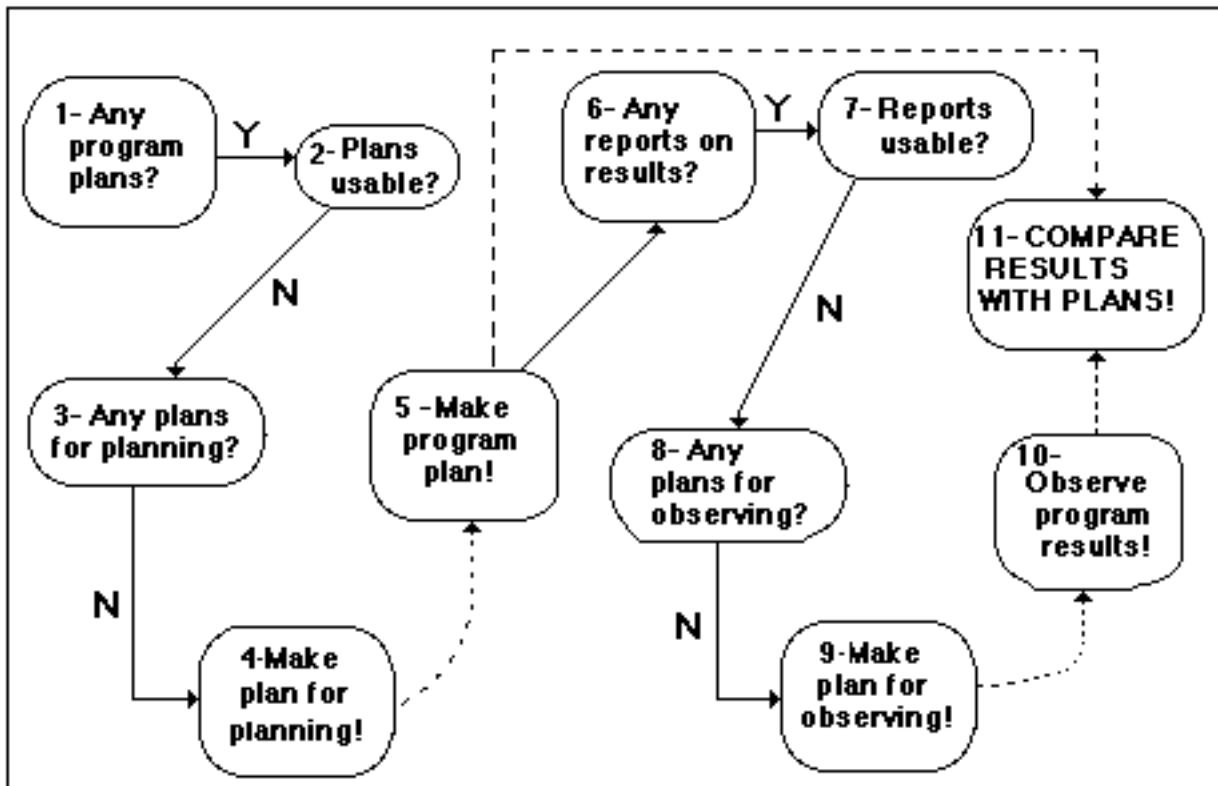


Fig. 4-2. The l-o-n-g-e-s-t route involves all eleven steps, when available plan and observation report are both rejected, at Steps 2 and 7.

Intermediate Paths: Taking Sides

Somewhere between the best and worst cases is the situation where the plans are fine, but the observation reports are not, or vice versa. One side may require only two steps, but the other calls for four or five, depending on whether managerial plans are available or must be developed before program planning or observation can take place.

The simplest way of looking at all these possible situations is to consider each side -- **plans** and **results** -- separately. There are only five possibilities on each side, but they can combine with each other 25 different ways. An interesting strategy in assessing a program is to have two sub-committees, each assembling information from either planning or implementation, and then bringing all the data together for the whole

group to carry out the comparison at Step 11. A review of the eleven steps will show what each sub-committee's assignment will be.

REMINDER**THE ELEVEN STEPS**

The Planning Side		The Operational Side	
Step 1	Is a program plan available?	Step 6	Is a report of program results available?
Step 2	Is the program plan usable for assessment?	Step 7	Is the report of program results usable for assessment?
Step 3	Is a managerial plan available for program planning?	Step 8	Is a managerial plan available for observing program results?
Step 4	Develop a managerial plan for program planning!	Step 9	Develop a managerial plan for observing program results!
Step 5	Follow the managerial plan to develop a program plan!	Step 10	Follow the managerial plan to observe program results!
		Final Assessment	
	Step 11	Compare program results with corresponding program plans!!	

5

Target , Context, and Mission

By now we are very familiar with the eleven steps in assessment and with the various pathways through them. But before we can begin to examine a program, we must be clear about three matters:

- A) exactly **which program** is being examined,
- B) the **context** within which it functions, and
- C) the **mission(s)** it is presumed to serve.

We can think of the first of these as our “**target**” program, the second as a “**frame**” within which the target is situated, and the third as the “**direction**” the program is headed. We need to be explicit about these matters before we carry out our very first step in assessment. We might call these three preparatory analyses, “prep-steps.”

Prep-step A: Target Program

First, we must **identify** the program about which we are concerned -- the **target** of our inquiry. A "program" can be as general as the entire K - 12 offerings of a school or as specific as the teaching of fractions to elementary-school pupils with particular traits, or anything in between.

Our target program can be identified by:

- >age or grade
- >subject field or topic
- >special characteristics,
if any, of the learners.

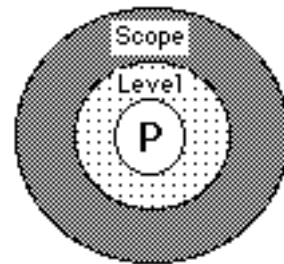


Fig. 5-1. Specify the program to be assessed.

To make sure we are all talking about the same thing, we ought to **write down** the identifying features of the program we are examining-- our target. We can then refer back to it from time to time to see if we are still on track in our troubleshooting. Also, others reading our final report in the future will be able to see exactly what it deals with.

Prep-step B: Target Program's Context

Second, we need to consider the **context** within which this program functions -- the "**frame**" in which the target is situated. What does our particular **situation** share with many other programs elsewhere, and in what way is it unique or at least different? We can think about each of the four edges of the program's **frame** as a different side of its setting : The four sides are its:

- > **natural setting** -- its location and climate and the times (today's) in which the program is operating
- > **cultural setting** -- the socioeconomic status of the sponsoring community, its dominant values and those of the families from which the learners come, plus all the available cultural artifacts and communal knowledge
- > **organizational setting** -- the various levels of the sponsoring society and education system , from nation to classroom, within which the program functions and which have a voice about its operation-- where the program fits on some table of organization.
- > **personal setting** -- the idiosyncrasies of key **individuals** concerned with the program
 - within the sponsoring **community**
 - among the **students and their parents**
 - on the **faculty and administration**
 - among **those of us doing the assessment**

These are the people we will have to work with, against, or around, in order to get at the facts and introduce change.

As we proceed through the relevant steps in our assessment, let's try continually to keep a picture in our minds of our **target program** inside its **contextual frame**. So that everyone involved in the assessment can visualize at all times the circumstances under which the program is operating, **write down a description of the setting** and add it to the program ID prepared earlier.

Prep-step C : Target Program's Mission

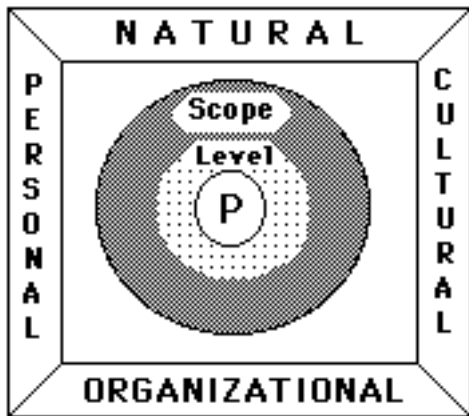


Fig. 5-2. The target program must always be viewed in context.

Before we can discuss goals, or the curriculum and the instructional approaches through which they are to be attained, we need to be clear about what mission or missions the program is supposed to serve.

A

program's mission can be thought of as its "super-goals," expressed as broad **categories** of student development.

The overall program mission can be viewed in terms of four lines of

development: **personal, social, economic, and academic.** The social

and economic missions have distinct sub-categories, making six in all. Consider whether a given program is **chiefly** concerned with developing students as **individuals, as group members, as citizens, as workers, as consumers, or as lifelong learners.**

Three "prep steps," then, before assessing any program:
 Precisely **what program** is to be assessed?
 Under **what conditions** does it operate?
 What **mission(s)** is it supposed to emphasize?

Visualize the pre-steps as in Fig. 5-3.

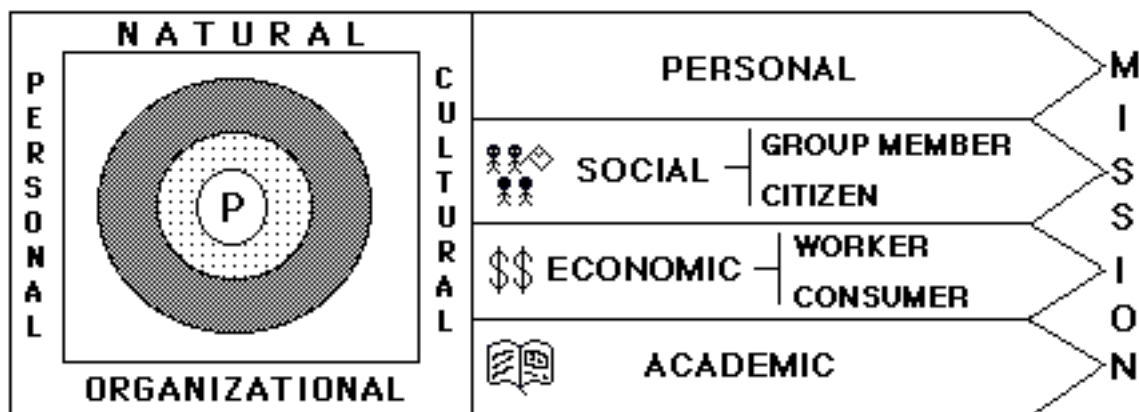


Fig. 5-3. Before assessment can begin, it is essential to know what the target program is, its context, and its mission.

6

Stage 1 : Student Development vs. Goals

Having identified the program, its context, and its mission, we are now in a position to begin assessment of that program. Is there dissatisfaction with the program? What is it? Here are the questions we might ask:

Stage 1. Are the program's **goals** being reached, i.e., are the students developing the characteristics the program was supposed to bring about?

Sub-questions:

- > Does the program's goal statement clearly identify those characteristics?
- > Are these reasonable goals for this program?
- > How well are they actually being achieved?

Stage 2. Are the students achieving the **learning outcomes** through which the program goals could be achieved?

Sub-questions:

- > Is there a curriculum for the program that clearly specifies those intended learning outcomes?
- > Are these reasonable learning outcomes for this program?
- > How well are the learning outcomes actually being achieved?

Stage 3. Are the students receiving the sort of instruction that might be expected to promote the desired learning?

Sub-questions:

- > Are there instructional plans that clearly identify appropriate experiences for such learning?
- > Do those learning experiences seem appropriate for this program?
- > How well are these plans being carried out in instruction?

The three main questions above pertain to the three assessment stages we identified earlier relating to intentions (goals, curriculum, and instructional plans) and the results (outcomes) of their implementation (instruction, learning, and development). We went through a general eleven-step procedure for comparing outcomes with intentions. Those eleven steps can be applied to each of the three stages. In this chapter we look at Stage 1, Chapter 7 deals with Stage 2, Chapter 8 with Stage 3.

REMINDER
STAGE 1 =
How well are the program's GOALS being achieved?

At Stage 1, the outcomes are characteristics developed by students and the intentions are the goals specifying what characteristics are to be developed. To carry out **Step 1.11**, comparing developmental outcomes with goals, we need to know two things:

- >1) the program's goals and
- >2) its developmental outcomes.

Discovering Program Goals

On the planning side of Stage 1 we can adapt and apply the general five-step routine we encountered in Chapter 3. In Fig. 6-1, the “program plan” is specifically a “goal statement,” expressing intended developmental outcomes. Hence, “PP” (program plans” is replaced by “G” -- the program’s goals.

We begin by looking for a statement of the program's goals.

Step 1.1- PROGRAM GOALS? Determining whether the school has a goal statement for the program, expressed in terms of the characteristics students are expected to develop.



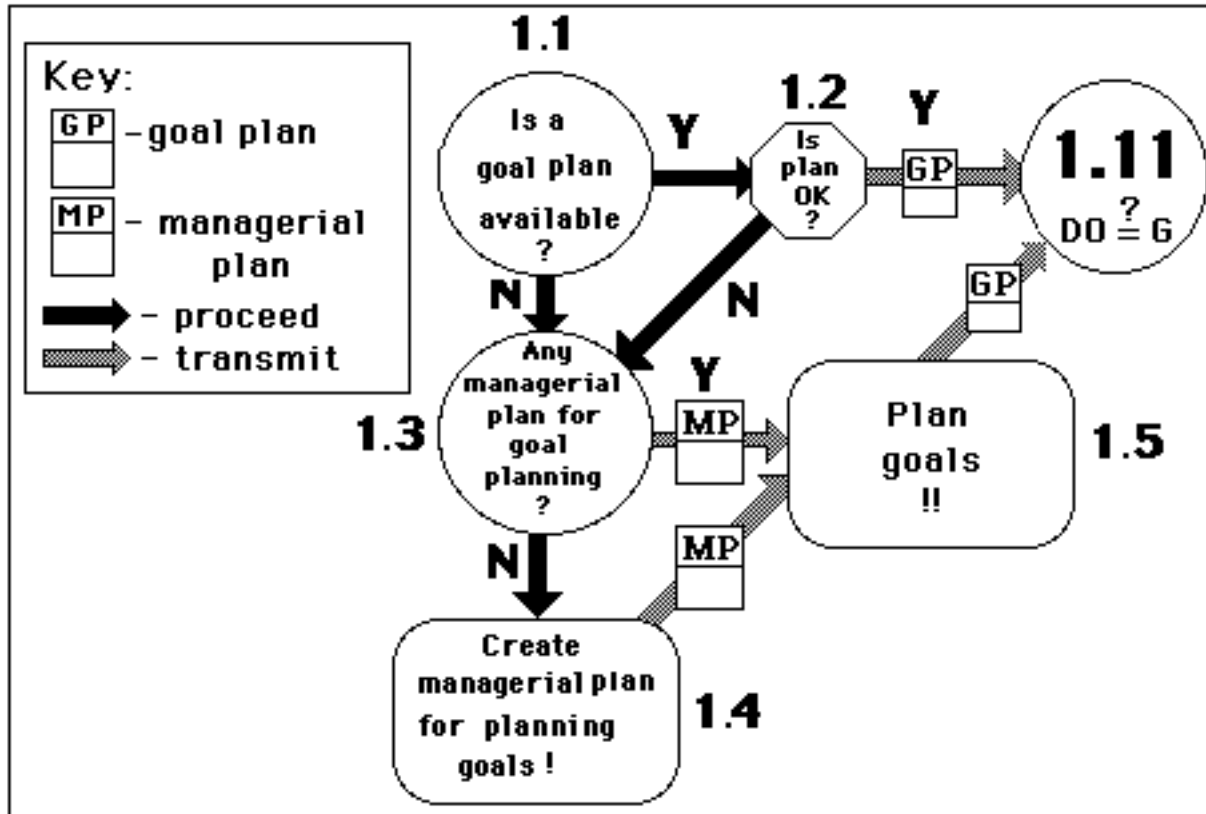


Fig. 6-1. Assessment Steps on the Planning Side of Stage 1.

Step 1.2- GOALS SATISFACTORY ? Deciding whether the



- listed goals are satisfactory for our purposes.
- > Are they expressed as changes in student development?
 - > Are they appropriate to program mission?
 - > Does the list seem to be complete?

Step 1.3 - MANAGERIAL PLANS for GOAL SETTING?



Determining whether they have any plans that can be followed in establishing program goals.

If there is no goal statement, expressed as the characteristics students are intended to develop through the program, we can't very well judge how effective the program is. We'll have to help formulate a list of program goals. This raises **two managerial** questions:

1.3 (1) - Does the school have a set of specifications for **goal statements**? Such a document would be a "blueprint" explaining what is meant by "goals" and what a goal statement should be like:

- > what **options** have been identified for possible inclusion as goals,
- > what **criteria** should be applied:
 - in **selecting** among these options and
 - in **structuring** them in some way?

1.3 (2) - Is there a list of procedures to be followed in goal setting? This document would be an "agenda," indicating

- > **who** is responsible for preparing goal statements and
- > **how** the "blueprint" in 1.3(1), above, is to be used (how the specifications are to be applied)?

If such specifications and rules for applying them are available, we can proceed to **Step 1.5** and have them applied. If either or

both is lacking, we'll have to go to **Step 1.4** and help formulate the missing managerial plans. (One can't decide on goals if one doesn't know what criteria the goals must meet and the procedure for applying those criteria.)

Step 1.4 - MANAGERIAL PLANNING: Helping plan how the program's goals are to be set.



The catalog of goal specifications [as in 1.3(1)] is a managerial **product** plan, and the agenda of procedural rules [as in 1.3(2)] is a managerial **process** plan. The specifications and rules are **not** part of the school program. They are managerial (administrative) plans for **program planning**. Such **planning for planning** will pay off later on.

Once these managerial plans for goal setting are ready, they can be applied as in **Step 1.5**.

Step 1.5. SETTING PROGRAM GOALS: What should the goals of the program be?



With a set of **specifications** for a goal statement and **rules** for applying them (from 1.3 or 1.4), we can help **prepare a goal statement** for the program we want to troubleshoot.

REMINDER

GOALS have to be expressed in terms of the characteristics we want students to develop through the program.

We must guard against goals' being phrased as the experiences students are to have, or education's benefits to them as adults, or the effects of education on society, or any other kind of justification, other than the attributes students are to develop through the program. When we have a satisfactory goal statement, we can leave the planning aspect and proceed to Step 1.6 which is concerned with results.

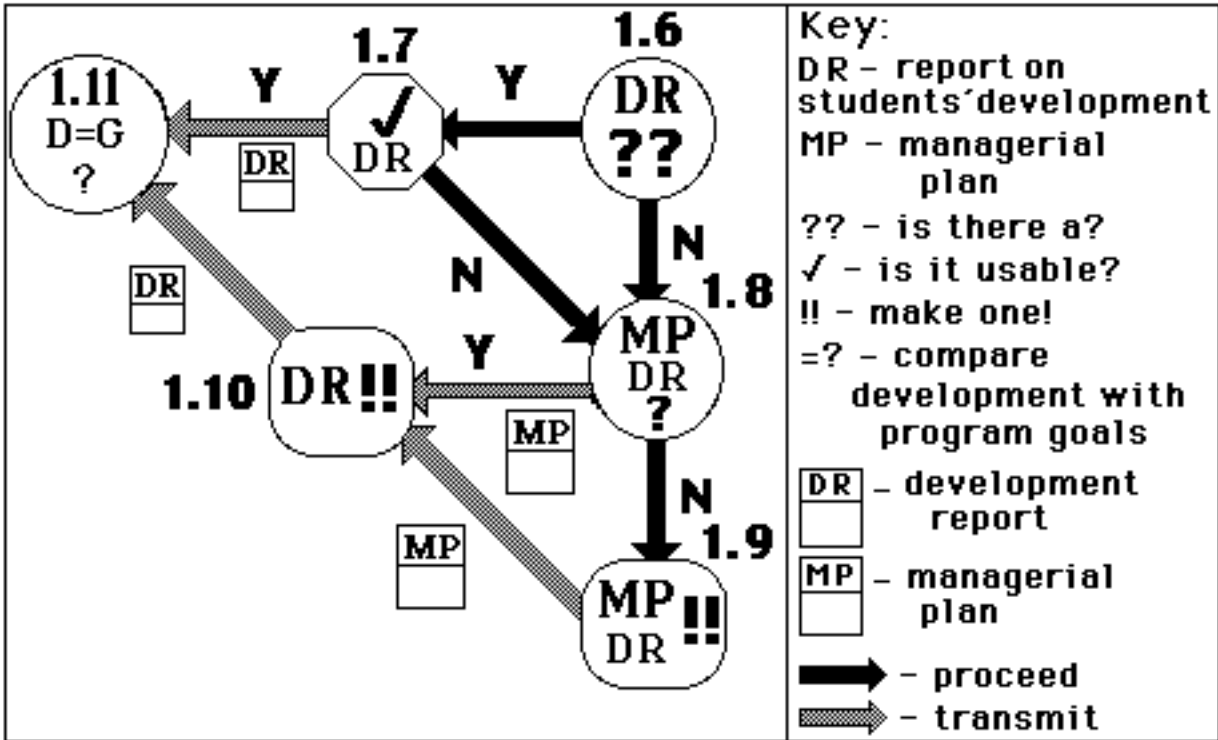


Fig. 6-2. Program Assessment on the Results (Operational) Side of Stage 1.

Determining Developmental Outcomes

On the operation side, we deal with observations of students' development and reports of those observations. If the steps shown in Fig. 6-2 are clear to you, skip to Fig. 6-3. But, for further explanation, continue with Step 1.6.

Step 1.6. REPORT ON PROGRAM RESULTS? Determining whether the school has a recent report on the program's developmental outcomes.



Once we are clear about the program's **goals** and accept their wording as valid, we will want to check the program's actual results against them. Is there a recent **report** showing how students have developed? If so, continue with **Step 1.7** in which we decide if the report is adequate for our purposes. Otherwise,

we must go to **Step 1.8** and plan how to arrange for the observation of such outcomes.

Step 1.7. IS THE REPORT SATISFACTORY? Determining if the report on student development is satisfactory.



Was the report based on the application of appropriate observation procedures and instruments? If so, we can move directly to **Step 1.11**. If not, we move on to **Step 1.8**.

Step 1.8. ANY MANAGERIAL PLANS FOR OBSERVING RESULTS? Are appropriate instruments available for determining the extent of student development, along with a plan for using them ?



Since we found no acceptable report showing what characteristics the students have actually developed, our next question is whether there are any suitable tests or inventories on hand for observing their attributes. If so, we can go to **Step 1.10** and apply them. If not, we must proceed to **Step 1.9** and develop them.

Step 1.9. PLANNING A MEANS OF OBSERVING DEVELOPMENTAL RESULTS: For each program goal that was accepted in Step 1.2 (or developed in Step 1.5), we need to see to it that some valid and reliable means are devised for determining the extent to which the goal has been achieved.



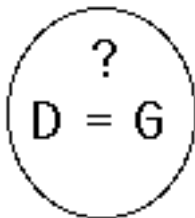
Our task is to come up with some way of detecting how well each student characteristic which the school is committed to developing has actually been developed. When a suitable procedure is ready, we can arrange for it to be applied in **Step 1.10**.

Step 1.10. OBSERVING GOAL ACHIEVEMENT: If suitable instruments already existed (or have now been devised), they should be used to determine what student characteristics the program has developed.



Since we now have both an acceptable goal statement and an appropriate report on the students' development, we have all we need for **Step 1.11**.

Step 1.11. COMPARING OBSERVED WITH INTENDED STUDENT DEVELOPMENT (GOALS) ? With short programs, this is very difficult and it may therefore be better to begin our assessment with learning outcomes (Stage 2).



Before moving to Stage 2 review the summary of Stage 1 in

Fig. 6-3:

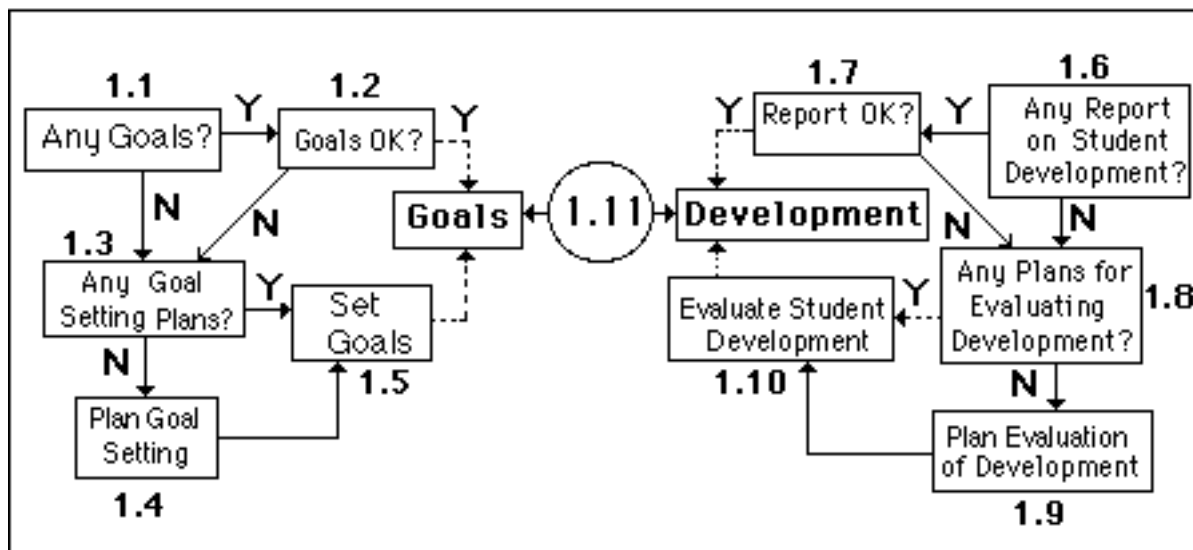


Fig. 6-3. Overview of the Eleven Assessment Steps in Stage 1.

7

Stage 2: Learning Outcomes vs. Curriculum

We are well aware by now of the three stages in program assessment and the rule that at every stage we check **RESULTS vs. PLANS**. Stage 1 was: Check STUDENT DEVELOPMENT vs. PROGRAM GOALS. [Stage 3 will be: Check INSTRUCTION vs. INSTRUCTIONAL PLAN.]

REMINDER
STAGE 2=
How well are the program's intended learning outcomes (CURRICULUM) being achieved?

At the first two stages, 1 and 2, the results sought are changes in students, and both kinds of plan are **product** plans:

- > **Goals** identify how students are intended to **develop** to fulfill the program's mission;
- > **Student development** comes about through learning;
- > **Curriculum** specifies the intended learning outcomes that are thought to be necessary for achieving the desired characteristics;
- > **Intended learning outcomes** are selected on

the basis of the goals (and other factors, as well).

For two reasons, Stage 2 will often be carried out **before** Stage 1. In the first place, it is much **easier to assess** students' learning than their development, and secondly, if the program is short, its **effect on students' development may not be noticeable**. By contrast, we are familiar with various kinds of instruments for measuring learning outcomes, and many of them are sensitive enough to detect relatively small amounts of learning.

To measure what learning has occurred one must know what learning was intended. We start therefore with the **curriculum**. If you are the least bit uncertain about any part of Fig. 7.1, below, you will want to read the explanation in the text that follows. If the figure is perfectly clear to you, feel free to skip to Fig. 7.2.

Ascertaining the Planned Learning Outcomes

We start by asking to see the curriculum for this program.

Step 2.1 - CURRICULUM AVAILABLE? Determining



whether the school has a curriculum document for the program, expressed in terms of the learning outcomes students are to acquire.

[If it is lacking, we skip to Step 2.3.]

Step 2.2 - CURRICULUM SATISFACTORY? Deciding whether the list of intended learning outcomes meets our needs.



- > Are various kinds of cognitions, skills, and affects included?
- > Are they appropriate for achieving the goals?
- > Are there important omissions?

We are not concerned here with the desirability of the curriculum's contents. But if we are not satisfied with the format and thoroughness of the curriculum document, we must help **revise** it appropriately. This will require managerial plans for curriculum planning.

Step 2.3 - MANAGERIAL PLANS for CURRICULUM PLANNING?



Determining whether the school has any plans that are to be followed in planning curriculum.

2.3 (1). Do these plans include a set of specifications for curriculum statements?

- > what **options** (potential learning outcomes) have been identified for inclusion as curriculum?
- > what **criteria** are to be applied
 - in **selecting** among these options and
 - in **structuring** the selections in some way?

2.3 (2). Is there a set of procedural rules indicating:

- > **who** is responsible for preparing curricula and
- > **how** the "blueprint" in 2.3(1) is to be used (how the specifications are to be applied)?

As with goals, if the **specifications** and **rules** for applying them are available, we can advance to Step 2.5 and ask that they be applied. But, if either or both is lacking, Step 2.4 comes first.

Step 2.4 - MANAGERIAL PLANNING: Helping plan how the program's curriculum is to be decided.



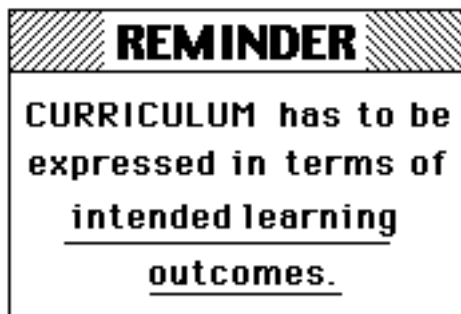
We need managerial plans that set forth the **specifications** the curriculum must meet, as in 2.3 (1), and the **procedures** for applying these specifications in

designing the curriculum, as in 2.3 (2). Once these managerial plans for curriculum planning are ready, we apply them in **Step 2.5**.

Step 2.5 - HELPING TO DESIGN CURRICULUM: What should the program's curriculum be?



With a set of **specifications** for curriculum items and categories and **rules** for applying them, we can help **design a curriculum** for the program we want to trouble-shoot. What do students need to learn in order to develop in accordance with the goals we accepted?



When we have a proper curriculum, we can leave the planning side and proceed to **Step 2.6** in the operation aspect. If Fig. 7.2 is perfectly clear by now, you can skip to Fig. 7.3. If not, read on.

Estimating Actual Learning Outcomes

On the operation side, we try to get evidence of what students have learned, based on some sort of observation guide, rating chart, or measurement devise. If a satisfactory report is available, so much the better; otherwise, we'll have to see that observations are carried out.

Step 2.6. ANY REPORT ON STUDENTS' LEARNING? What are the program's actual learning outcomes?



Once we have agreed on the program's intended learning outcomes and accept them as valid, we can check the program's actual results against them. Is there a recent report showing the program's learning results, based on an appropriate observation instrument? If so, on to Step 2.7. If not, skip to Step 2.8.

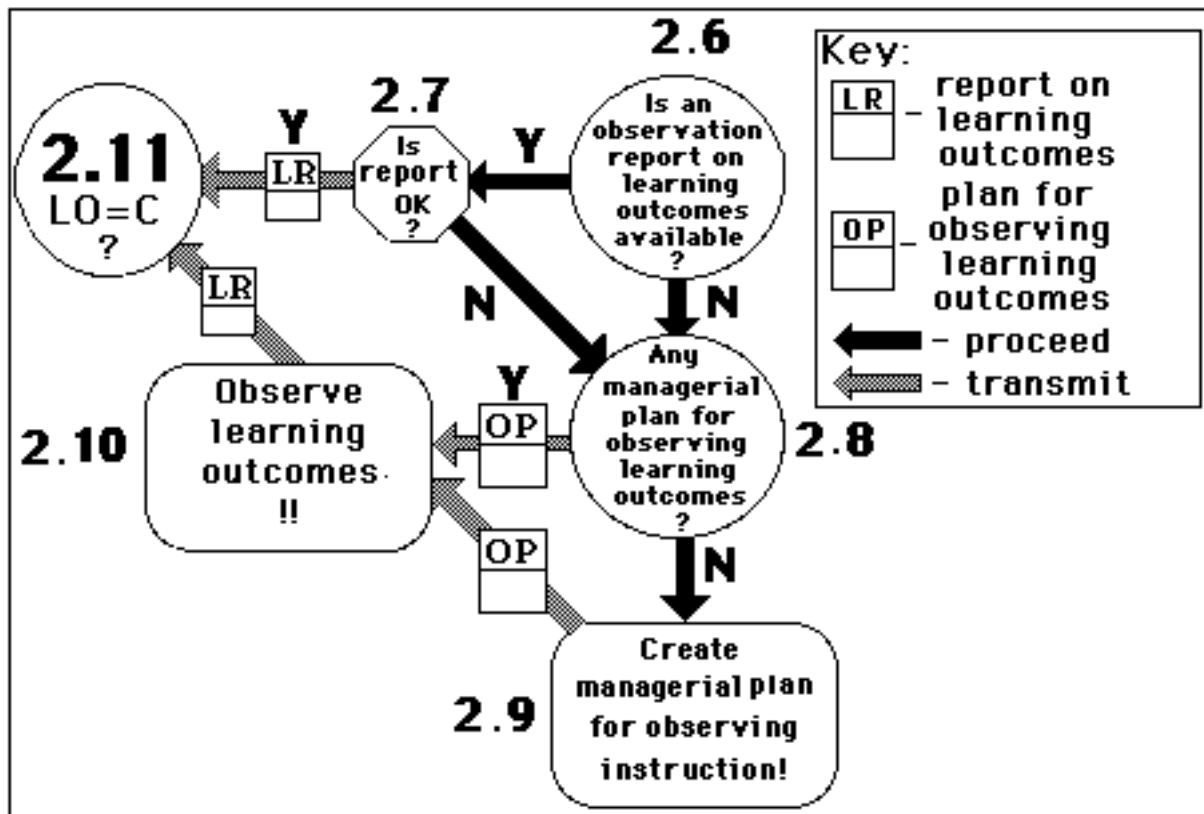


Fig. 7-2. Assessment Steps on the Observation Side of Stage 2.

Step 2.7 - IS REPORT SATISFACTORY? Determining if the report on learning outcomes is acceptable.



Were appropriate tests and observation procedures used? If we are satisfied with the report, we can go to Step 2.11. If not, we proceed to the next step.

STEP 2.8 - ANY MANAGERIAL PLANS FOR EVALUATING LEARNING?



Are appropriate achievement tests or observation instruments available and provisions for administering them?

Since we have no report showing what the students have

actually learned, the next question is whether suitable tests or inventories are on hand. If so, we can go to **Step 2.10** and apply them. If not, we must go to **Step 2.9** and develop or choose some.

Step 2.9. PLANNING HOW LEARNING IS TO BE EVALUATED:



We need to devise or locate valid and reliable ways of determining the extent to which intended learning outcomes have been achieved.

After we have come up with some way of sampling how well students have actually learned what they were intended to learn (or if one was already available to us in **Step 2.7**), we can proceed to the next step.

Step 2.10. EVALUATING STUDENTS' LEARNING: Whether instruments



already existed (or have now been devised), they can now be used to determine what learning outcomes the program has brought about.

Once this report on program results is in hand, we can go on to **Step 2.11** and compare them with the **intended** learning outcomes.

Step 2.11 - COMPARING ACTUAL WITH INTENDED LEARNING

OUTCOMES: Did students acquire the cognitions, skills, and affects specified in the program's curriculum?

A final diagram, Fig. 7.3, reviews all eleven steps in Stage 2, showing how the planning and operational sides fit together around the ultimate assessment step.

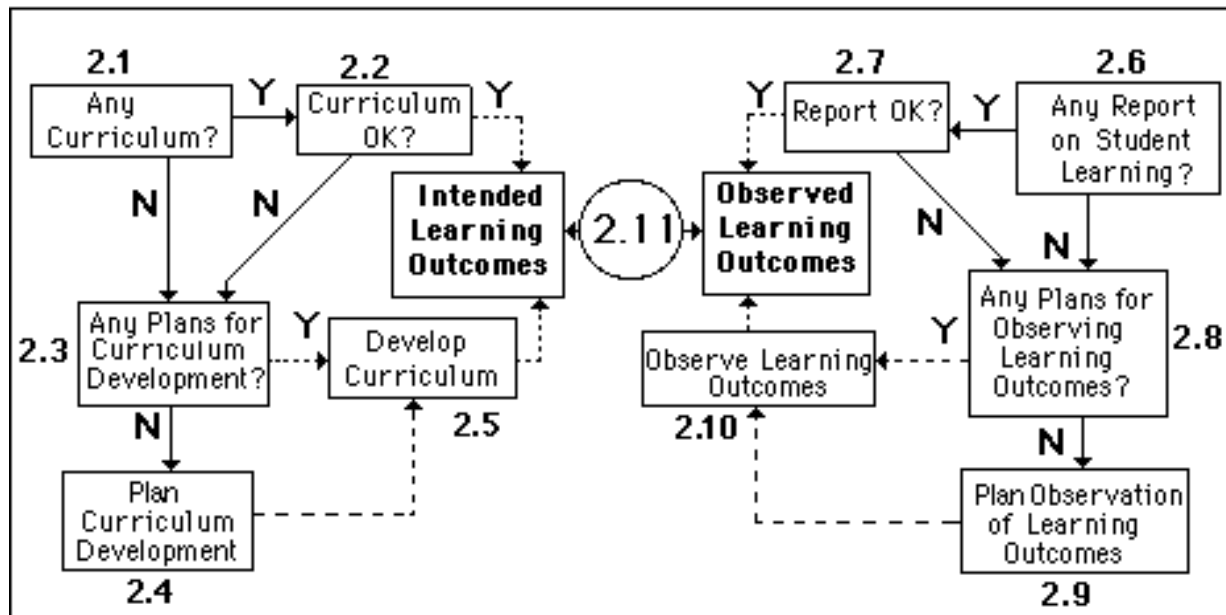


Fig. 7-3. Putting the Planning and Operational Aspects Together: The Eleven Assessment Steps at Stage 2.

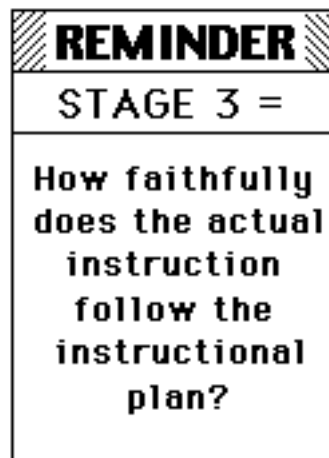
8

Stage 3 : Instruction vs. Instructional Plans

In comparing **RESULTS** with **PLANS** at the first two stages in program assessment, we dealt with product plans that indicate the developmental and learning outcomes students are intended to achieve. At the third stage, however, a process plan is involved, dealing with the **means** by which the learning and development are to be brought about.

Stage 1 = Checking STUDENTS' DEVELOPMENT vs. GOALS
Stage 2 = Checking Actual LEARNING OUTCOMES vs. CURRICULUM

We noted earlier the difficulties in assessing students' development at Stage 1. At Stage 3, there are two problems. One is that results can **only be determined through classroom observation**, which sometimes can be disruptive. (One could, of course, question teachers and/or students as to what occurred during instruction, but this approach is not very satisfactory.) The second problem, however, is that **instructional planning is a professional matter** in regard to which laymen's opinions may not be well received.



The same eleven steps used with the program's products can also be applied to the instruction process, however, and since they are familiar by now, only a brief reminder should be sufficient for many of them. As before, if the five assessment steps in the planning aspect shown in Fig. 8.1 are clear, proceed to Fig. 8.2. If more explanation is desired, continue with the text that follows below.

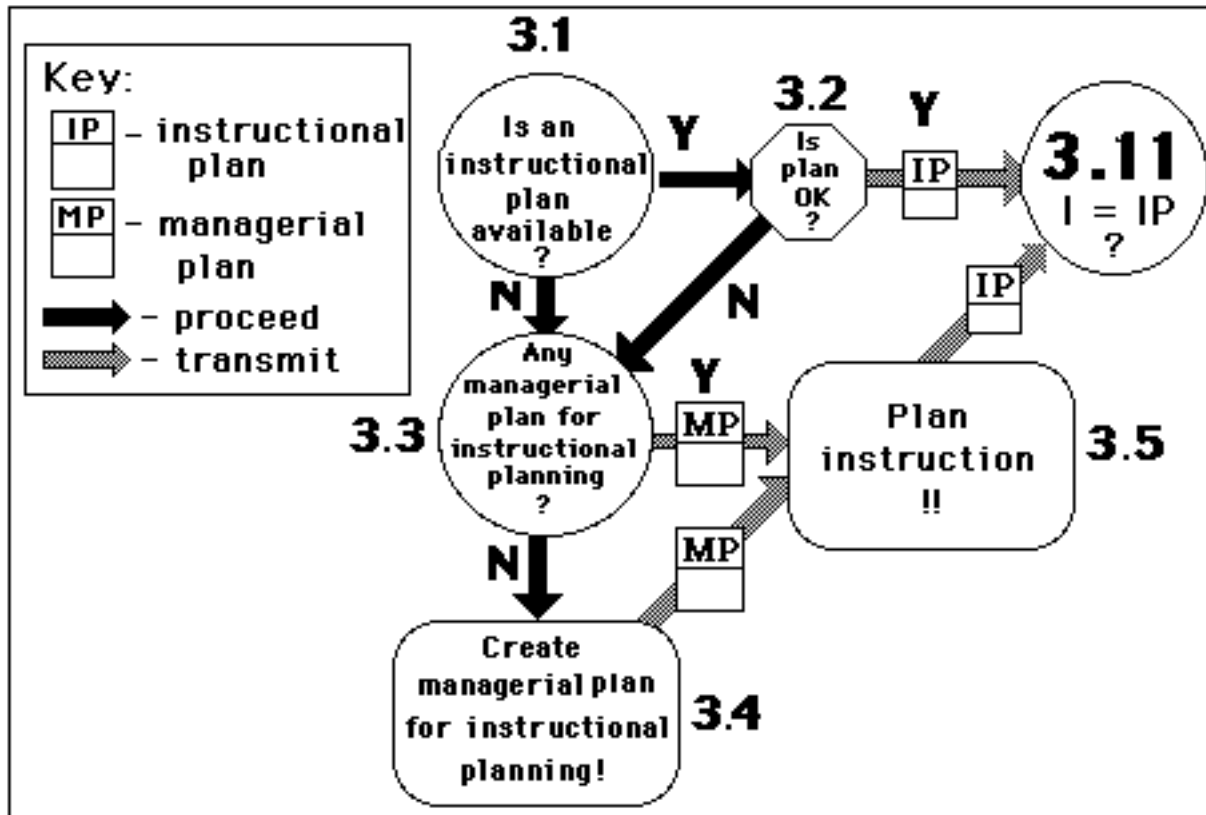


Fig. 8-1. Assessment Steps on the Planning Side of Stage 3.

Obtaining Instructional Plans

We need instructional plans against which to assess instruction. As always, we begin by asking whether such plans are available and

then check to see whether they are adequate for our purposes.

Step 3.1. INSTRUCTIONAL PLANS? Inquiring whether there are any instructional plans for the program that show what learning experiences students are to have.



More so than the program products, the instructional process lies almost entirely within the professional domain of teachers and their supervisors. Laymen can play an important part in setting program goals and share in deciding what learnings are most likely to contribute to them. But with respect to instruction, they primarily should concern themselves with whether plans exist and appear to be reasonable. If no written plans exist at Step 3.1, we proceed to Step 3.3.

Step 3.2. SATISFACTORY INSTRUCTIONAL PLANS?



Considering whether the planned learning experiences seem likely to promote the intended learning and development.

The plans should indicate both what **activities** students are to engage in and with what **content**. This instrumental content, unlike that specified in the curriculum, is not necessarily to be learned, but merely used with the learning activities. (Thus, in spelling, each word may be used in a sentence, but that sentence

in particular need not be learned; to explain the concept of “force” in physics, various exemplars must be given, but those particular ones do not have to be retained; shop skills that are to be learned must be applied to some project, but it matters not whether it be a breadboard or a bookshelf.)

If the plans are acceptable, we go to **Step 3.5**; otherwise we must check in at **Step 3.3**.

Step 3.3. MANAGERIAL PLANS: Determining whether the school has any guides for planning instruction.



3.3 (1). Do these guides include a set of specifications for instructional plans?

3.3 (2). Is there a set of procedural rules indicating:
> **who** is responsible for planning instruction and
> **how** the specifications are to be applied

If the specifications and rules for applying them are available, they can be applied in **Step 3.5**. But if either or both is lacking, we must first turn to **Step 3.4**.

Step 3.4. MANAGERIAL PLANNING: Helping plan how the program's instruction is to be decided upon.



Just as the planning of instruction is primarily the responsibility of the professional staff, so also is the planning for that planning. Our interest is to see that both the specifications and the procedures in 3.3 (1) and 3.3 (2) are set forth.

Step 3.5. DESIGNING INSTRUCTION: What learning activities and content should be used in the program?

IP!!

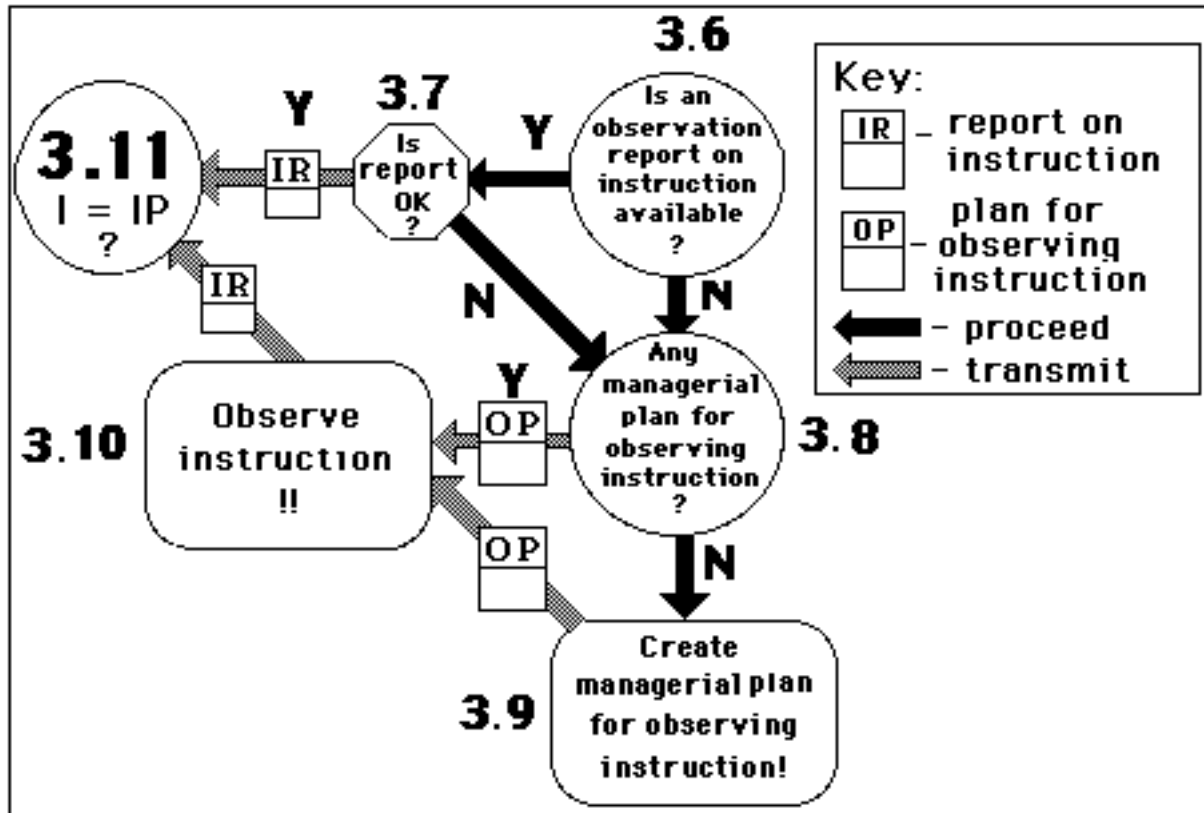


Fig. 8-2. Assessment Steps on the Observation Side of Stage 3.

With a set of **specifications** for instructional activities and content as well as **rules** for applying them, we can monitor the formulation of **instructional plans** for the program.

We will want to assure that the planners remember that:

- >> Instructional plans have to be expressed in terms of intended learning activities and of instrumental content deemed likely to bring about the intended learning. <<

When we have satisfactory process plans, we can proceed to **Step 3.6**. If Fig. 8.2 is clear, try the review at the end of the chapter.

Observing Instruction

A description of what occurred in the instructional situation might have been recorded by the teacher or teachers, or reported by an observer, or even preserved on video or audio tape. If no such record can be provided, it is necessary for us to arrange for someone to observe in the classroom or other instructional venue, or for teachers to keep logs of the instructional transactions. Either approach requires careful managerial planning as to what is to be recorded, by whom, and when.

Step 3.6. REPORT ON INSTRUCTION? Determining whether a report exits based on observation of the instruction provided in this program.



If a report on the instruction is available, we proceed to Step 3.7 to decide if it is suitable for our use in assessment. If there is none, we skip to Step 3.8.

Step 3.7. REPORT SATISFACTORY? Do the reports provide the kind of evidence needed to determine whether plans had been faithfully followed?



At Step 3.2 we specified that instructional plans must deal with the activities in which learners are to engage and the “instrumental” content toward which the activities are directed. We need to check whether both of these elements are included in the reports of instruction.

Step 3.8. MANAGERIAL PLAN FOR OBSERVATION? Such a plan will specify what aspects of instruction are to be observed and under what conditions.



A satisfactory plan can be applied in Step 3.10. If none is on hand, one must be formulated in Step 3.9.

Step 3.9. MANAGERIAL PLANNING FOR OBSERVATION. A plan must be devised which will guide the observation of students’ activities in the instructional situation, as well as the “instrumental” content they deal with.

When a suitable observation guide is ready, it can be applied in instructional contexts dealing with the program we are assessing (Step 3.10).

Step 3.10. OBSERVING INSTRUCTION. Whether suitable observation guides were available in Step 3.7 or newly developed in Step 3.10, they must be applied to determine whether instruction likely to lead to the intended learning and development is actually provided.



Since we now have an acceptable instructional plan and report on instruction, we are ready to carry out **Step 3.11** comparing the actual and planned instruction. Fig. 8.3 summarizes the entire Stage 3 assessment.

Step. 3.11. COMPARING OBSERVED INSTRUCTION WITH INSTRUCTIONAL PLAN. Did students engage in the planned activities and were these directed at appropriate instrumental content?

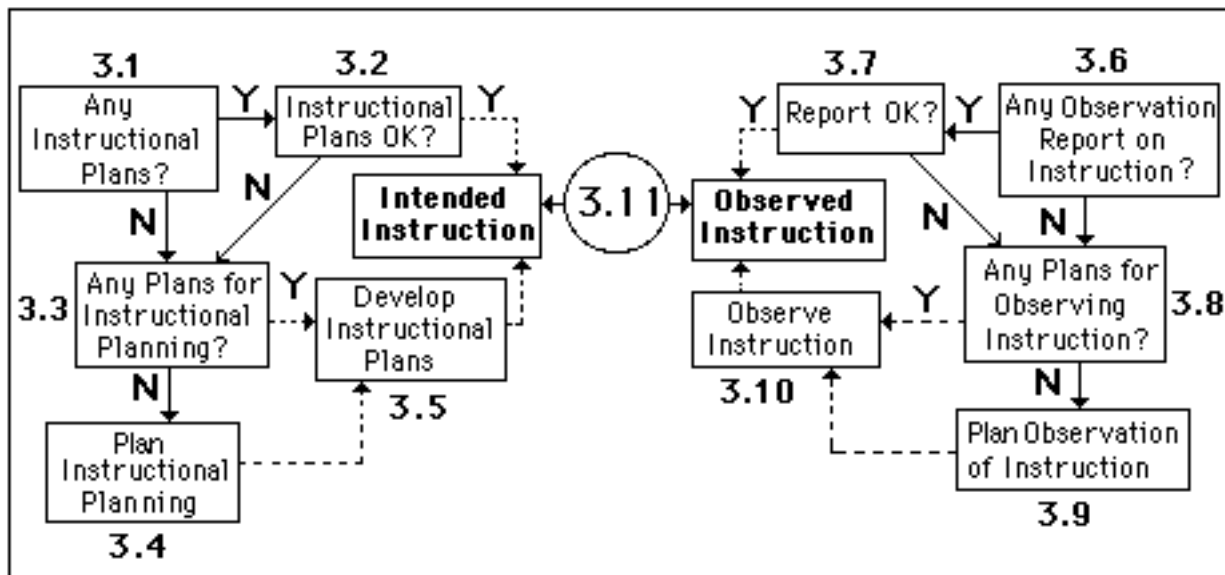
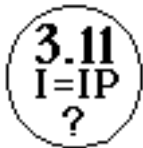


Fig. 8-3. Overview of the Eleven Assessment Steps in Stage 3.

9

Managerial Planning

The process of planning and the plans produced by it have occupied an important place in our story of program assessment. We are familiar with the distinction between **managerial** planning and **program** planning and between **product** planning and **process** planning. We know what must be planned at each of the three program phases and can distinguish between the **planning** and **operation** aspects. Examine Fig. 9-1 and classify each of the twelve items in the planning aspect using the terminology used in this paragraph.

We are aware that managerial planning is required not only in program planning side, but also in **designing observation instruments and procedures** for use in assessment. And, finally, we are familiar with the role of plans in every “**Step 11,**” where the **intentions** they embody enter into comparison with **outcomes**.

It is useful, nevertheless, to understand a few more details about plans and the planning process. Three topics in particular are worthy of consideration:

- **The nature of planning**
- **Review of product and process plans**
- **Managerial planning of planning and observation**

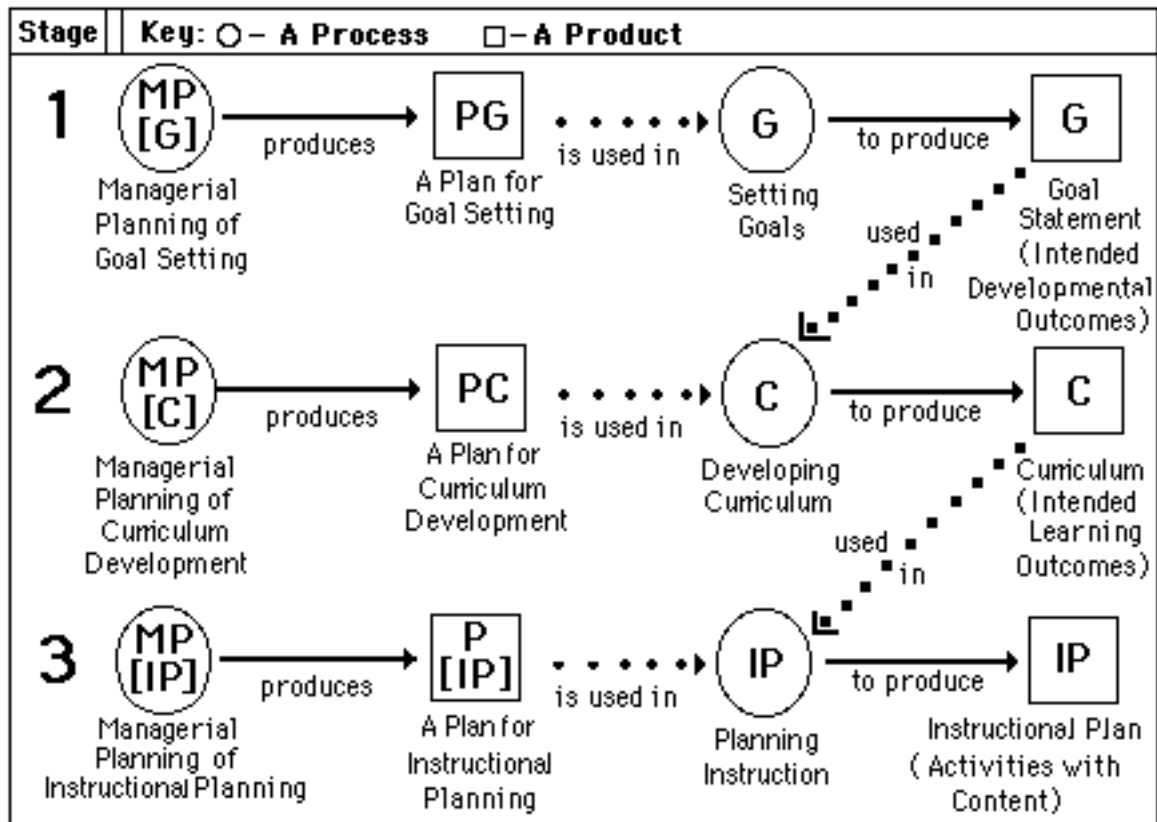


Fig. 9-1. Summary of Three Stages of Managerial and Program Planning.

The Nature of Planning

First, consider what is required in any kind of planning. Think of instances when you have planned something -- anything. Now narrow it down to planning some finished product that you were thinking of making (or having someone else make or even buying already made.) You envision the completed product that will best suit your needs or fancy. The maker or purchaser must have the specifications for whatever is to be made or bought (except when you buy something on the spur of the moment, strictly on "impulse.")

To plan is essentially to make a selection from options. If there are no options, there is nothing to select from; hence, there can be no

planning. If the reservoir contains a number of options, but none is selected, there will be no plan. In any instance of planning, inquire what the options were. One cannot choose among alternatives unless one knows what the "selection criteria" are and what weight each carries. If the most important criterion is applied first to each alternative, a number of the options will probably be eliminated, and the final choice can then be made from a smaller "field." In any event, one must be

explicit not only about the possibilities from which a choice can be made, but also about the rules for making that choice. Fig. 9-2 illustrates the selection process.

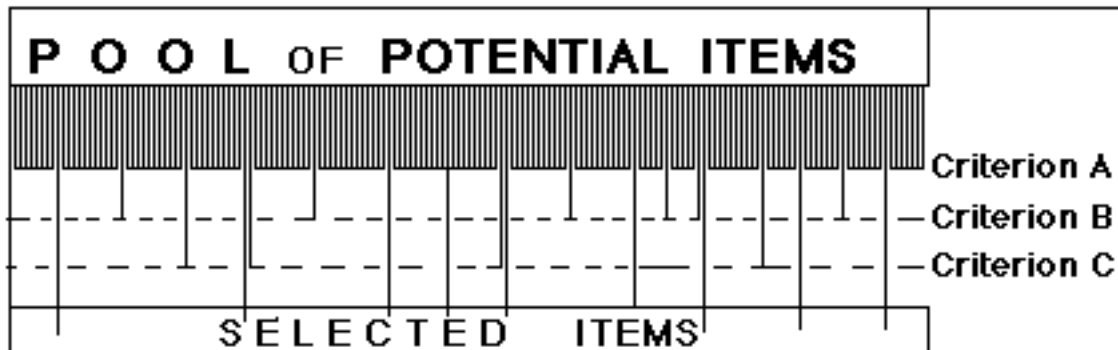


Fig. 9-2. The Selection Process in Program Planning.

An example in which, from a vast reservoir of possible goals or curriculum items, only 19 met Criterion A, of which 13 also met Criterion B, and of these only six also satisfied C and were selected for inclusion as program goals or intended learning outcomes.

In many instances, when a number of items are selected, their initial listing is haphazard. If a list is to be arranged in some sequence or hierarchy, the planner needs to be told, or decide, what “**structuring criteria**” are to be applied. Thus, the goals for a program may be arranged in the priority order in which they are to be emphasized. The categories into which curriculum items are structured may reflect their

subject matter or the type of outcome, such as facts, concepts, principles, and abilities. A complete managerial plan for planning will identify not only the language of the items to be chosen, their sources, and the criteria for selection, but also the criteria for structuring those that are selected.

First and foremost among the criteria for the **selection** of **goals** is “consistency with the program’s missions.” Goal selection can begin by indicating which of the six possible mission areas (Chapter 5) the program is to emphasize. One must then identify the personal traits associated with each of the designated missions. Many so-called “goals” have been publicized over the years. Some of the lists presented in Appendix 1 may provide goal planners with ideas. The language of the various lists varies greatly, however, so a first step is to consider whether the language of the

statement truly refers to a developmental attribute that students can be helped to acquire through instruction. Rewording is often necessary to make a list coherent. If the list of goals is to be structured using missions as main categories, it should be kept in mind that a given goal may serve more than one mission, e.g., a particular characteristic of a good group member may also be valuable in a good employee or learner.

At the level of **curriculum**, the primary selection criterion is that each learning outcome must contribute to the realization of one or more program goals. No matter how desirable a given learning may be, if it makes no contribution to any of the goals, it belongs in some other program, not this one. On the other hand, if it is **prerequisite** to another outcome that has already been selected, it, too, must be included in the program.

Subject specialists are the best source of advice as to which learning outcomes are critical to the acquisition of others. They are also able judge the likely difficulty level of various items for the students for whom the

program is designed. Textbooks and state-issued syllabi are potential sources from which appropriate curriculum items can be selected.

Unfortunately, one cannot depend on all of these sources to identify clearly what **kind** of learning outcome is being proposed. Fig. 9-3 provides examples of five kinds of outcome associated with some illustrative subject fields. Planners should be able to classify similarly every single item in a curriculum that they seriously expect to be achieved in the instructional phase.

TYPES OF LEARNING OUTCOMES					
FIELDS	COGNITIONS			SKILLS & ABILITIES	VALUES & INTERESTS
	Particular Facts	Concepts	Generalizations		
Reading	Letters of alphabet Punctuation marks Word meanings	'Sentence' 'Clause' 'Paragraph'	Rules of pronunciation and spelling	To pronounce words To follow lines of print	Satisfaction Enjoyment
Math	Multiplication table Perfect squares Decimal and common fractions	'Pi' 'Diagonal' 'Postulate' 'Infinity'	Formulas Theorems Rules Principles	To solve To prove To construct	Accuracy Rigor Speed
Science	Anatomy of animals and plants Atomic weights and numbers Taxonomies	'Cell' 'Molecule' 'Electron' 'Gene'	Ohm's Law Avogadro's Principle Natural selection	To identify and dissect specimens To use instruments	Curiosity Objectivity Reflectivity

Fig. 9-2 (a). Examples of five kinds of learning outcome in three subject fields.

The process plan for the program's instruction will specify activities in which students are to engage, what content will serve as a medium for bringing about the desired learning, and in what order and on what time schedule the activities are to be carried out. With these notions of product and process, as well as those of selection and structuring discussed earlier, clearly in mind as they pertain to program planning, let us now apply them to the managerial planning without which programs could neither be planned nor their results observed.

Product Planning and Process Planning

We have used these terms a number of times previously, but a few more comments about them may be helpful. Recall that a **process** plan describes a proposed procedure for creating something or achieving some result.; a **product** plan envisions that creation or outcome.

The previous section discussed plans for the two basic **products** of an educational program: (1) developmental characteristics of students, anticipated in a **goal statement**, and (2) intended learning outcomes, proposed by a **curriculum**. These product plans describe those traits under one or more of six possible missions that are to be developed in the program and which relevant facts, concepts, principles, capabilities, and affects are to be acquired to promote that development. These two product

plans for the program provide the basis for the program's process plan, namely, the **instructional** plan. This is the only one that can be implemented, the one through which the products -- learning and development -- can be realized.

In the next section, we find that managerial planning also produces product and process plans of a different sort.

Managerial Planning of Planning and Observation

Recall that we encountered **managerial** planning in two contexts: the planning of **planning** and the planning of **observation**. A **managerial product plan** provides specifications for either a program plan or an observation instrument. It will tell the **planner** what kind of language to use in the plan, what reservoir of options to tap, what selection criteria to apply, and what categories to employ in arranging the selected components. It will tell the **observer** what kind of instrument to use in observation and how to sample the results that are to be observed.

The **managerial process plans**, on the other hand, will indicate who is to do the planning and observing, where these activities will take place, and on what time schedule. These plans are administrative in that they involve the allocation of time and space and assignment of duties to faculty and students. Most schools will have on hand plans setting forth established rules and procedures for carrying out planning and observation, though these guidelines will usually have to be adapted to the conditions of a particular assessment. Fig. 9-4 lists twelve kinds of managerial plan and shows what each is used for in operation and observation. Fig. 9-5 presents them somewhat differently and indicates what the contents of each should be. Compare Figs. 9-4 and 9-5, using the numbers to match them up and more fully understand each plan.

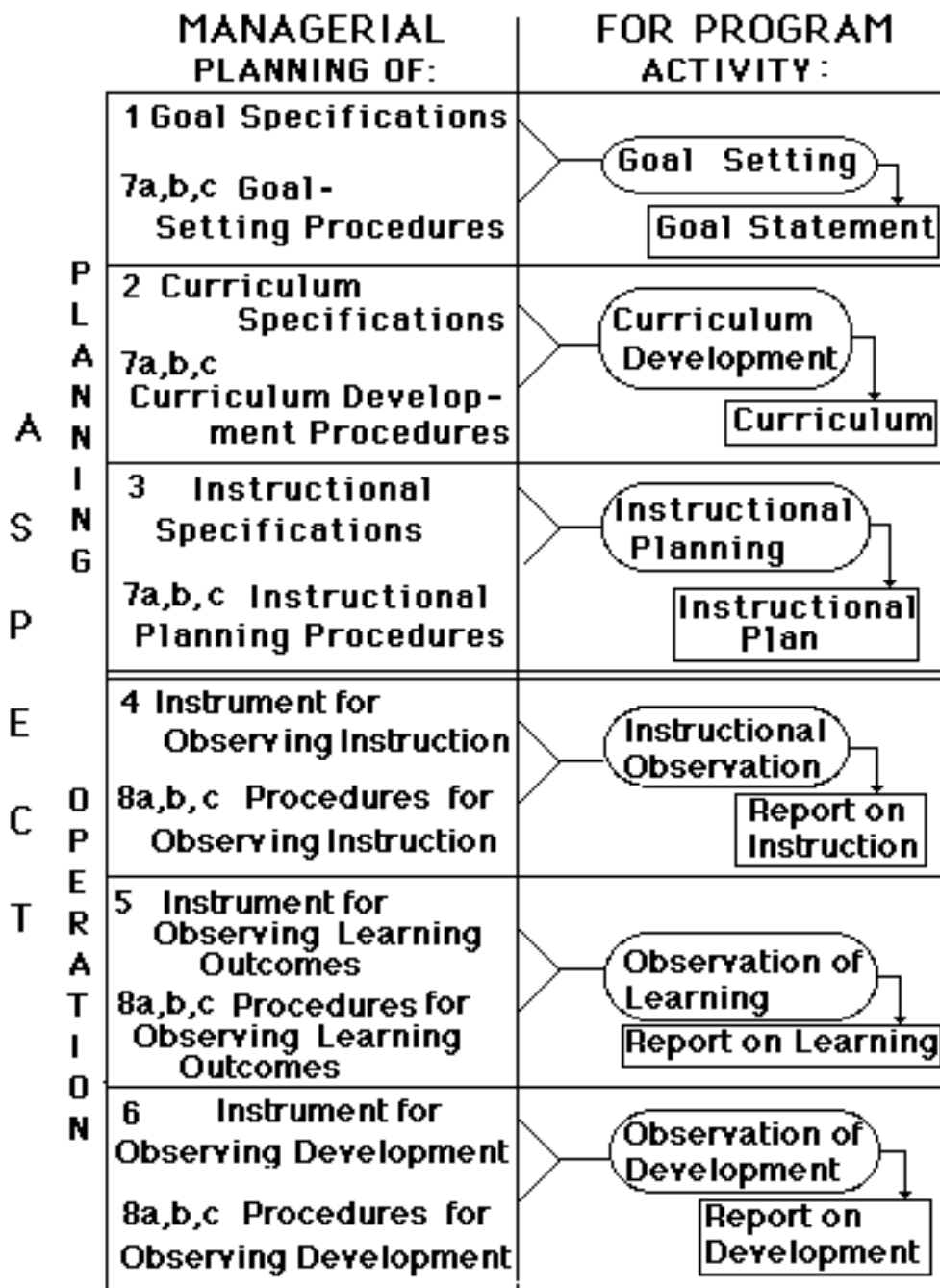


Fig. 9-4. Twelve Managerial Plans Used to Create Three Program Plans and Three Observation Reports Needed in Program Assessment

Managerial Planning	
Of Program Planning	Of Program Observation
MANAGERIAL PRODUCT PLANS Specifications for:	MANAGERIAL PRODUCT PLANS Specifications for:
1 > Program missions > Goal language > Sources of potential goals > Selection criteria > Structuring criteria	6 > Observation guides, checklists, inventories, rating sheets, etc. for noting students' development as individuals, group members, learners, and workers
2 > Curriculum language > Sources of potential learning outcomes > Selection criteria > Structuring criteria	5 > Standardized tests, rating sheets, etc. for subjects and topics > Examination types for factual knowledge, conceptual understanding, mastery of principles, performance ability, moral and aesthetic values
3 > Instructional language > Pool of potential activities > Sources of instrumental content > Selection criteria > Bases for organizing instructional plan	4 > Observation forms for use in noting and recording activities and their associated content in instructional situations
7 MANAGERIAL PROCESS PLANS a Procedures for planning program products and processes b Personnel assignments for program planning c Schedules and space allocations for program planning	8 MANAGERIAL PROCESS PLANS a Procedures for selecting, designing, and applying instruments for observation of program processes and products b Personnel assignments for observing program operation and results c Schedules and space allocations for examinations and observations

Fig. 9-5. Managerial product and process planning for program planning and observation of results.

A Look Backward and Forward

The first eight chapters tried to explain in great detail what is entailed in assessing educational programs. We started by becoming familiar with the three **phases** and two **aspects** of a program, then looked at the three **stages** and eleven **steps** in the assessment process. Next we encountered the three “pre-steps” of **target, context, and mission**, before looking at the eleven steps for **goals, curriculum, and instructional plans**.

The remarks and charts in the current chapter have provided a basis for extending assessment from the program itself to **the program plans and the observation procedures**. A dozen different kinds of managerial plan form the basis against which to assess goal statements, curricula, and instructional plans, as well as instruments for observing students' development, their learning, and the instructional transactions which define the educational program in action. There is no shortage of things to assess; fortunately each and every one is assessed by comparing outcomes with intentions.

The appendix and brief bibliography are intended to provide some further assistance to folks who find themselves trying to apply the lessons in this book in an actual assessment situation. The **Appendix** pulls together the language used by various groups and individuals over the years in trying to express the goals of schooling and the curriculum through which they might be achieved. For those not familiar with these statements, they may suggest a way of wording ideas that are hard to express.

The **Bibliography** includes works mentioned or alluded to in the text, plus a few other items which might prove to be interesting.

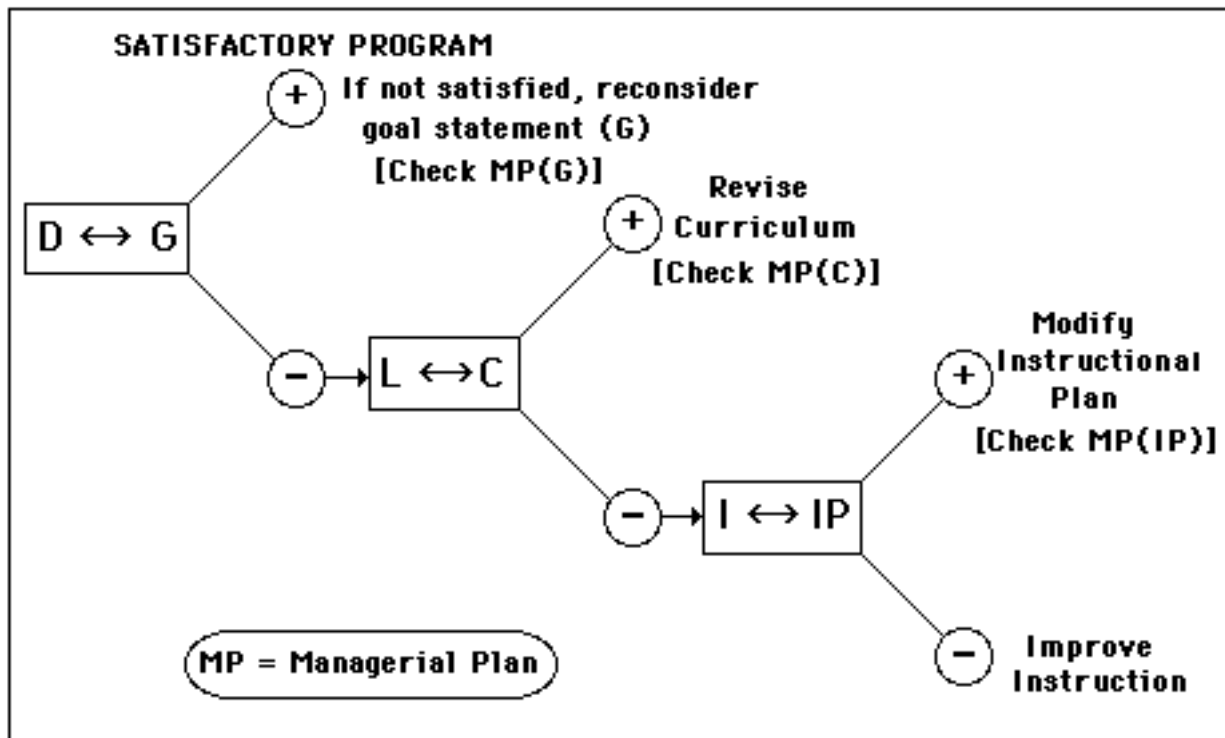


Fig. 9-6. Four possible assessment results and corrective action needed.

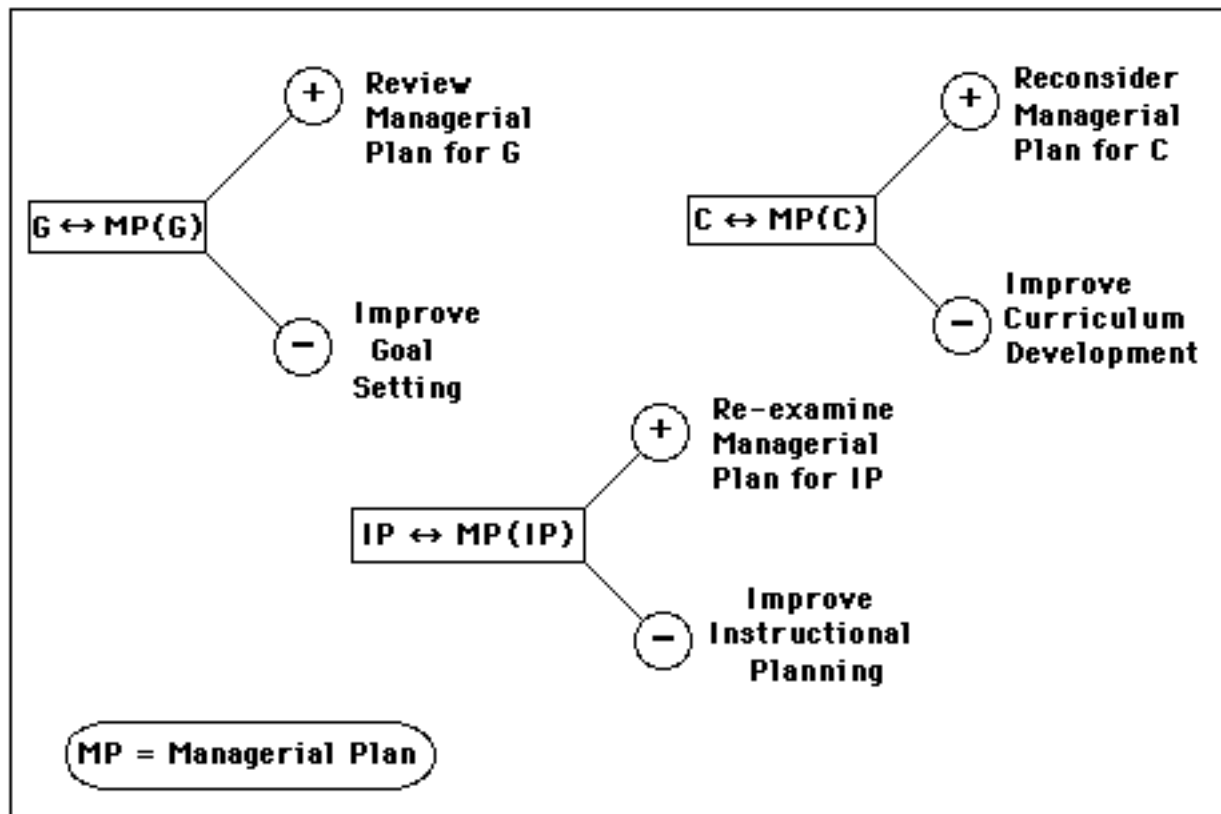


Fig. 9- 7. Six possible results of reviewing Managerial Plans for program planning and corrective action needed.

APPENDIX

A. Educational Goals

[1] Goals 2000 - (1994)

The Congressional Act, called "Goals 2000: Educate America," pertains to our society's goals for **improving** education, not the goals of education itself. The Act speaks about such concerns as (1) "school readiness," (2) "school completion," (3) "student achievement and citizenship," and (4) "teacher education and professional development." None of these indicates what sort of **student development** a school program should strive for in fulfilling its mission. The only one that hints at some result that can be developed through learning is the third one, which states further that:

"by the year 2000, all students will leave grades 4, 8, and 12 having demonstrated competency over challenging subject matter, including English, mathematics, science, foreign languages, civics and government, economics, arts, history, and geography, and every school in America will ensure that all students learn to use their minds well, so they may be prepared for responsible citizenship, further learning, and productive employment in our nation's economy."

The first paragraph is expressed in terms we associate with "curriculum categories," not "goals." The second paragraph, interestingly, identifies three of our "missions" or broad goal categories --citizenship, further learning, and vocational productivity, and a fourth, "personal living," is implied.

Under this third goal, the Act lists six so-called "objectives." Four of them appear to relate to one or more of our "goals." They speak of wanting all types of students to demonstrate higher levels of:

- (1) **academic performance**,
- (2) **abilities** to think and communicate,
- (3) **language competence**, and
- (4) **knowledge** of nation and world.

The remaining two objectives are more instructional in tone, referring as they do to:

- (5) **involvement** in certain activities and
- (6) **access** to health and physical education.

[2] National Commission on Excellence in Education: A Nation at Risk - (1983)

David Gardner served as chairman of a commission appointed by Terence Bell, U. S. Secretary of Education. A statement on p. 4 expresses their idea of “goals” as follows:

All . . . are entitled:

- to a fair chance and
- to the tools for developing their powers of mind and spirit to the utmost
- to attain the mature and informed judgment needed to secure gainful employment and to manage their own lives, thereby serving not only their own interests but also the progress of society itself.

A bit later (p.14) they viewed formal schooling as "foundation for lifelong learning, career as well as general quality of individual life," thereby once again pointing to several of our major goal categories.

[3] President's Commission on National Goals - (1960)

This Commission, appointed by President Eisenhower and chaired by Henry M. Wriston, classified fifteen goals for the nation at home and abroad, of which Number 4 concerned **education**. The report of the panel on education, written by John Gardner, offered 25 recommendations. While none of them concerned goals explicitly, their report began with a reminder that we value education as a means of fostering “individual fulfillment,” in order that each one may be “worthy of a free society and capable of strengthening a free society.” Of all our society’s values, education most directly promotes “equality of opportunity” among

individuals that “differ greatly in their talents and motivations.” (p. 81)

After calling for a “striving for excellence” to produce “certain specially needed kinds of educated talent,” the report concluded by cautioning that these tasks should not crowd out “the great basic goals of our educational system: to foster individual fulfillment and to nurture . . . free, rational and responsible men and women.” (p. 100)

[4] New York State Board of Regents: Goals for Elementary, Secondary, and Continuing Education -1973

Old now, but still timely, this very extensive listing comprised forty goals arranged under ten "macro-goal" headings. It should prove very helpful to any group trying to formulate goals. The ten general ones, somewhat modified here, fit nicely into five of our six "mission" areas:

(1) Personal Development

- Mastery of basic skills of communication, computation, and

reasoning:

- “communication skills (e.g., reading, writing, speaking, listening, viewing)”
- “computational operations (e.g., mathematical conceptualization, problem-solving, data collection)”
- “logical process of thinking clearly, creatively, and constructively in problem solving, planning, evaluation, analysis, research, etc.”
- Ability to maintain one’s mental, physical, and emotional well-being:
 - “knowledge of good health habits, conditions necessary for well- being, sound community health practices, and safety principles and practices”
 - “ understanding body processes and functions”
 - “ development of physical fitness”
 - “knowledge of physical and health problems caused by drug addiction and other personally harmful activities”
- Competence in developing values -- spiritual, ethical, religious, moral:
 - “skill in making value-based choices”
 - “ commitment to own values”
 - “ knowledge and acceptance of diversity of values in society”
- Knowledge of humanities and social and natural sciences:
 - “knowledge of basic methods of inquiry in each field”
 - “ interdisciplinary efforts to focus knowledge on problems”
- Knowledge and appreciation of our culture and capacity for creativity, recreation, and self-renewal:
 - “knowledge of major art, musical, literary and drama forms”
 - “ appreciation of beauty and of diversity of man’s historic and cultural heritage”
 - “ development of individual creative talents”
 - “wise use of leisure”
 - “promotion of increased use and appreciation of community resources that reflect our cultural heritage and achievements”
- Knowledge of environment and relationship between own acts and quality of environment:
 - “preservation and wise use of resources
 - “understanding effects on environment of man’s activities and values”

(2) Human relationship

- Respect for and ability to relate to differing people:
 - “understanding of home and family relationships and one’s relationship to natural, economic, and social environment”
 - “ respect for community of man and other social, cultural, and ethnic groups”

(3) Civic responsibility

- Understanding processes of effective citizenship in order to participate in and contribute to government of our society:
 - “knowledge about political, economic, and legal systems, with emphasis on

- democratic institutions and global interdependence”
- “knowledge of taxation, fiscal policy, and American political process”
- “acquisition of skills in decision making, group participation, leadership and “followership”

(4) Economic Productivity

- Occupational competence necessary to secure employment commensurate with ability and aspiration and to perform work in a manner gratifying to individual and to those served:
 - “developing work skills and habits and awareness of work opportunities
 - “ occupation selection, training, and retraining”

(6) Further Learning

- Ability to sustain lifelong learning to adapt to new demands, opportunities, and values of a changing world:
 - “knowledge of contemporary society and alternative futures”
 - “ skills of learning, personal planning and problem defining and solving”

[5] Educational Policies Commission (NEA): “Purposes of Education in American Democracy” - 1946

Three reports of this Commission, issued between 1937 and 1941, were brought together in a single volume in 1946. One of the three, originally published in 1938, dealt with education’s purposes and was composed by William G. Carr. He classified objectives under four main headings, similar to, but not exactly like, the mission categories we have used. His first one, “Self-realization “ (our Personal development), resembles ours, as does his third, “Economic efficiency.” Like us, he divided the broad social mission into “Human relationship” and “Civic responsibility.” He did not treat “Further (or lifelong) learning” as a separate category (although the very first “personal” goal is defined as having an “appetite for learning”).

A total of 43 objectives were listed under the four headings, as follows:

Personal Development	Human Relationship	Economic Efficiency	Civic Responsibility
Inquiring mind	Respect for humanity	Good workmanship	Social justice
Speak clearly	Friendships	Occupationally informed	Social activism
Read efficiently	Cooperative	Select occupation	Understand society
Write effectively	Courteous	Vocational success	Critical judgment
Counting, calculating	Appreciate family		Tolerate differences

Listening, observing Health knowledge Health habits Public health * Recreation Appreciate beauty Life philosophy	Conserve family ideals Homemaking Democratic family relationships	Maintain efficiency Social value of work Personal economics Consumer judgment Efficient buyer Protect own interests	Conserve resources Social value of science World citizenship Respect for law Economic literacy Accept civic duties Devotion to democracy
--	---	--	--

* Misclassified? More appropriate under either human relationship or civic responsibility?

[6] NEA Commission on the Reorganization of Secondary Education -1918

This Commission issued one of the earliest and perhaps most influential reports on the purpose of education in American society. It was limited to the secondary school level and gave support to the comprehensive high school which would be able to adapt to the needs of a wider clientele and still provide preparation for higher education.

The Commission issued reports for many school subjects, but the one that became best known was a small pamphlet entitled Cardinal Principles of Secondary Education. Among many such principles was a list of seven "objectives" which were soon widely assumed to be the seven "cardinal principles." These seven were not in themselves goals, objectives, or learning outcomes, but aspects of life to which school goals apply. They can be grouped under five of our six "missions," as follows, showing that this classification was accepted many years ago:

(1) Personal Development

- Health
- Worthy use of leisure

(2) Human relationship

- Ethical character
- Worthy home membership

(3) Civic responsibility

- Citizenship

(4) Economic productivity

- Vocation

(6) Further Learning

- Command of fundamental processes

These selected statements of educational objectives, issued over a seventy-year span, reveal considerable agreement as to what school programs should accomplish, though they do not consistently speak in terms of student traits or characteristics. Taken together, they do provide support for our six-way classification of goals and a careful consideration of the specific items can suggest good candidates for adoption and thereby reduce the likelihood of any appropriate ones being overlooked.

Appendix B. Curriculum Items

In his 1929 volume, The Aims of Education, Alfred North Whitehead issued two commandments that bear upon curriculum:

- (1) Do not teach too many subjects
- (2) What you teach, teach thoroughly -- stressing the joy of discovery and an understanding of the “persistent present”

Whatever we select for inclusion in the curriculum, we must always be clear about what **kind** of learning it is, and at some point, express it so that will be clearly understood. At one level, it is all right to list **subjects** and **topics**, but eventually these must be broken down into **specific “learnables,”** of which there are at least the five kinds listed in the table below. Only a few examples are given for a small sampling of subject fields; experts in these subjects can identify many others of a similar nature and experts in other subjects can pattern their listings on these. Whether a given item qualifies for inclusion depends on the learners’ stage of development, what goal is to be served, its priority in achieving that goal, and whether it is prerequisite to learning some other curriculum item.

[1] Hirsch’s “Core Knowledge” for “Cultural Literacy”

E. D. Hirsch, Jr., the author of Cultural Literacy (1987) and The Schools We Need (1996), would argue for giving highest priority to the shared “core knowledge” which makes up “the intellectual capital of a society” and should be the common possession of all culturally literate people. In the Appendix to his 1987 volume he lists, alphabetically, about five thousand items that educated Americans know or, in his opinion, ought to know. The list does not refer to the subject and topic to which items belong, nor does it give any indication of which ones are thought to be more important than others.

Since Hirsch emphasizes a “cognitive core,” all of his listed items are **cognitions**, none being performance abilities or affective responses. Nevertheless it is a useful compilation with which curriculum developers can check their selections and get further ideas. While ninety percent of a large group of consultants agreed on the included items, it is not intended as a complete catalog, and it deliberately omits other material that should be learned, though it is not limited to “literate” persons. Subsequent dictionaries have extended the list.

One helpful distinction is the labeling of literary works as either “title” or “text,” the first indicating awareness of the work, the second, familiarity with its contents. As to names of people and places, however, it is not evident what is to be known about them. And for terms that denote abstract concepts,

there is no indication whether the learner is to define the term, grasp the concept, or cite an exemplar. Strangely, only six dates are included, all but 1066 being between 1492 and the present. Dates such as 44 B.C., 476 A.D., and 1215 don't make it, but neither do 1732, 1787, 1809, 1849, and 1929.

In his more recent The Schools We Need (1996), Hirsch provides two brief essays particularly relevant to our assessment approach. One, on pages 26-33, bears on our first step at Stage 3, where we ask to see the program's curriculum. It is entitled "The Myth of the Existing Curriculum". The other section is entitled "Consensus Research on Pedagogy," pp. 159-175, which summarizes some studies dealing with the effectiveness of various instructional techniques. This discussion is relevant to the second and fifth steps at Stage 3, in which an instructional plan is judged or created.

[2] A Grid for a Curriculum Pool

Between 1956 and 1972, three "taxonomies" of educational "objectives" were issued, one each for the **cognitive**, the **psychomotor**, and **affective** "domains." These classification systems were extensive and detailed, perhaps too much so to be of much practical value to people developing curriculum. But foremost they serve as reminders that there are these three large domains to consider, and they serve as good references to make one aware of some of the finer distinctions among learning outcomes.

The main categories of the three domains, presented below, may impress the reader with the great variety of types of potential learning outcomes which can be included in a curriculum. Though these taxonomies are decades old now, they remain as valid as ever and may profitably be consulted both by those planning and assessing a program. Figure 9-2 in the text greatly simplifies these categories into five: particular facts, concepts, generalizations, skills/abilities, and attitudes/interests.

TAXONOMY of EDUCATIONAL OBJECTIVES

COGNITIVE DOMAIN (knowing)

- 1.0 Knowledge:
 - 1.1-Specifics: terminology; facts
 - 1.2- Dealing with Specifics: conventions; trends; classifications; criteria; methods (inquiry, problem solving, evaluating)
 - 1.3- Universals and abstraction in a field: principles; theories

- 2.0 Comprehension: translation; interpretation; extrapolation
- 3.0 Application
- 4.0 Analysis: elements; relationships;organizing principles
- 5.0 Synthesis: unique communication; plan; abstract relations
- 6.0 Evaluation: internal evidence; external criteria

AFFECTIVE DOMAIN (feeling)

- 1.0 Attending: awareness; “openness”; selective attention
- 2.0 Responding: acquiescence; willingness; satisfaction
- 3.0 Valuing: acceptance; preference; commitment
- 4.0 Organization: conceptualized value; organized value system
- 5.0 Characterization by a value: generalized set; characterized

PSYCHOMOTOR DOMAIN (moving)

- 1.0 Reflex movements
- 2.0 Basic movements:locomotor; non-locomotor; manipulative
- 3.0 Perceptual abilities: kinesthetic; visual; auditory; tactile;
coordinated
- 4.0 Physical abilities: endurance; strength; flexibility; agility
- 5.0 Skilled movements:adaptive skills--simple; compound (with
implement); complex (usually without support)

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