



3. Analyzing Early Childhood Education Programs: *D. Evaluation*

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WHETHER or not program evaluation is a clearly articulated aspect of an early childhood education program, evaluation will take place. It may be as casual as a conversation between parents as they meet in the store and exchange views on what is, or is not, happening in the school program; or it may be more formalized, perhaps a conference between supervisor and teacher to discuss the progress of children.

In any case, some type of evaluation is taking place whenever people assess the quality of the educational program. If the evaluation is to be an integral part of the education program, decisions regarding its purpose, criteria, procedures, and instrumentation will be made as a part of the total program planning, rather than at the end of the year or in isolation from other program decisions.

Purpose of the Evaluation

The general purpose of evaluation is to determine whether or not what is expected to happen has happened or is happening. This purpose provides a general framework for evaluation which accommodates all empirical questions regarding the effectiveness of a given program designed to accomplish specified objectives. It is important to make a distinction between empirical questions,

the answers to which are based on empirical data, and value questions, the answers to which require judgments of desirability and of value positions. Value questions must be dealt with in deciding on program objectives and procedures; empirical questions deal with what actually happened, whether desired or not.

A given evaluation may be viewed as either process- or product-oriented and its purpose described as summative, comparative, or formative.¹ *Process evaluation* is focused on the program procedures, on the setting in which the program takes place, and especially on the behavior of the adults who participate. The main questions asked concern the nature of materials and equipment, the plant and physical space, and adult roles, especially whether adults are functioning as intended. *Product evaluation* has to do with outcomes and questions whether the program achieved what it was supposed to accomplish.

Process evaluation is seldom carried out systematically. Product evaluation, while often systematic, is seldom sufficiently comprehensive in terms of time span covered and variables considered; nor is such evalua-

¹ See: Michael Scriven. "The Methodology of Evaluation." In: R. Tyler, R. Gagné, and M. Scriven. *Perspectives of Curriculum Evaluation*. Chicago: Rand McNally & Company, 1967.

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tion usually well enough focused on significant variables.

Summative evaluation is most common. Here the purpose is simply to determine to what extent a program has fulfilled its intended product goals (for example, did the children enrolled change as much as hoped for?). A second form of product-oriented evaluation is *comparative evaluation*, in which two or more programs are contrasted in terms of their effects on children.

A large independent research effort might be involved in which the particular aspects of each program to be compared are specified in detail, and the main canons of experimental research are followed. A third purpose for evaluation often involves both product and process emphases. In *formative evaluation* the purpose is to facilitate decision making by feeding back information into an ongoing program. Information is collected on these two questions: Are the students showing signs of responding and changing in the direction of program objectives? Have the intended program procedures been implemented?

Two general points should be made before going on to specific aspects of evaluation. The first is that one important index of the extent of instruction differentiation may be found in the degree to which it carries on both initial diagnostic assessment of pupil status and continuing evaluative assessment of the amount of change or development, especially as related to specific program procedures. This information is

also one index of the program's adaptability to different kinds of children and different environmental conditions.

The second point is accountability, which is relevant to both the purposes and the procedures of evaluation. Every educational program has many constituencies to which it is accountable. Generally, some form of reporting (that is, summative evaluation) is essential, although the particular form of the report may vary among constituencies. Therefore, data should be available for reports appropriate to the needs for which such reports are made. Examples of constituents are: children, parents, teaching staff, school administration, and funding agencies.

Criteria Used for Evaluation

Evaluation, even the most casual, matches observation to a model and makes a judgment regarding the exactness of fit between the two. The model may be clearly defined, such as some of those used in Follow Through programs, or it may be loosely defined and, in fact, take on a definition as a result of the evaluation process. In either case, it is necessary to decide what program variables are to be used to describe and define the model and the program. These variables or objectives set the criteria which may be used in the evaluation. The following are examples of variables which may be used to describe models and programs:

1. Expected outcomes in terms of children's behavior change or learning and development, as indicated in program objectives

2. Implementation of program procedures, including

a. Staff behaviors (teachers, aides, specialists, etc.)

b. Materials and equipment available and ways utilized

c. Nature and arrangements of physical space and plant

3. Extent and quality of parent and community involvement.

Procedures and Implementation

The time schedule for collecting data is determined, in part, by the purpose of the evaluation. In general, one of the following three procedures can be used to describe any given evaluation data collection time schedule:

1. Data collected at one point in time. This schedule allows a comparison of the model expectation and the program at a specified point in time.

2. Data collected at two points in time, as exemplified by the classical pre- and post-test schedule. This schedule allows an analysis of change and a comparison of the observed change and the expected change, as defined by the model.

3. Longitudinal evaluations, generally, collect data at critical points over a long period of time (that is, more than a year). The critical times are specified by the model. This schedule allows an analysis of change, as in 2 above, but with a greater degree of sophistication.

A program evaluation may use many types of instruments to collect data. Instruments should be appropriately related to the variables (that is, criteria) which define the model and the program. Any given evaluation may select instruments of the following general types, depending on the purpose of the evaluation:

1. Instruments for use in determining the progress of the children (cognitive, affective, and perceptual-motor domains)

—Standardized tests (group or individual)

Achievement tests
Developmental tests
Intelligence tests
Readiness tests

—Teacher (staff) constructed tests

—Observations by staff, parents, children, specialists

—Interviews and questionnaires (including self-reporting questionnaires) completed by staff, children, parents, specialists

—Children's products

2. Instruments for use in determining the effectiveness of staff behavior

—Observations

—Interviews

—Questionnaires

—Rating scales

3. Instruments for use in determining the effectiveness of the learning environment

—Observation of organization of the physical plant and space

—Observations and questionnaires regarding the use of materials and equipment

4. Instruments for use in determining the quantity and quality of parent involvement

—Interviews

—Questionnaires

—Observations

5. Instruments for use in determining the quantity and quality of community involvement

—Interviews

—Questionnaires

—Observations.

In planning for program development, one may find that it is desirable to provide for an assessment of the program evaluation. As the early childhood education program evolves and develops, so should the evaluation component. It may be necessary periodically to monitor the evaluation to be certain that it is relevant to the ongoing program. As objectives or priorities change, the evaluation procedures, including instruments, should change to maintain the meaningful match between the program and its evaluation. □

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