

Teacher-Made Tests and Techniques

can help in evaluating growth

EVALUATION in modern schools should be based upon the concept that multiple learnings develop simultaneously during an educational experience. For example, what is involved if the learner is studying the topic of transportation? We assume that his experience in visiting terminals and airports or reading about transportation in a reference book or textbook may at one and the same time influence growth in his information, his attitudes, his interests, his work and study skills, his powers of critical thinking and his personal and social adaptability.

In order to assess the multiple learnings of children, the teacher and supervisor should plan for comprehensive evaluation of major objectives. For this purpose, some of the tests and measures will be standardized and administered periodically. Other methods of appraisal will be informal and will be used daily by the teacher as part and parcel of the instructional process.

Comprehensive Program of Evaluation

Evaluation involves primarily the gathering of evidence to estimate the degree to which pupils and teachers are

achieving educational objectives. Evaluation involves, first, the formulation of major objectives such as: (a) acquiring facts, concepts and generalizations; (b) developing desirable interests, attitudes and appreciations; (c) showing skill in handling facts, concepts and generalizations; (d) increasing powers of critical interpretation of data; and (e) improving personal-social adaptability.

A second step in the evaluative process is to define the major objectives in terms of the behavior of the learner which will indicate that he is achieving the objective. The definitions should outline specifically the types of skills, abilities, understandings, attitudes and interests that the school is seeking to develop in learners. This will serve to clarify the objectives for the purposes of both instruction and evaluation.

Evaluation involves also the limited use of formal tests and measures, as well as the extensive use of informal quizzes, reports, observations and anecdotal records and sociometric methods which reveal pupil growth toward each major

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objective. The use of teacher-made tests and techniques helps the teacher to guide better the development and growth of each learner from day to day.

Informal Methods and Tests

Informal methods and teacher-made tests are a necessary part of evaluation. This is true, first, because day-by-day classroom appraisal is of equal or greater importance than standardized tests administered usually not more than once per year; and second, because standardized tests and published scales are not available for measuring interests, attitudes and critical thinking at the elementary school level. Many practical suggestions in informal methods of evaluation are given in the Forty-Fifth Yearbook, Part I, National Society for the Study of Education, entitled, *The Measurement of Understanding*, and distributed by the University of Chicago Press.¹

Information and understanding may be measured informally by teacher-made tests using multiple choice, true-false, or completion types of test items and exercises. Work-study skills may be assessed informally by observing children systematically as they use reference books, dictionaries, and the index of a book and by examining in oral or written form their ability to interpret maps, graphs, charts and tables in a normal classroom situation.

Powers of thinking may be assessed informally by observing the pupil's ability to draw inferences or to make interpretations of verbal, graphic and statistical data in specially constructed test exercises or in oral and written reports. In a like manner the ability of

pupils to apply concepts and generalizations to specific situations may be observed and examined in special test exercises or as a part of regular instruction.

Evaluating Attitudes and Interests

Under the general category of attitudes, this discussion will include interests and personal-social adaptability of children. Adequate measurement of achievement of these important, but relatively intangible, objectives is very difficult. There are few formal or standardized measures or techniques which will be valid in many situations. For this reason the informal techniques of evaluation, such as observation, writing of anecdotal records, rating scales and check lists, frequently provide the evidence which teachers use in making judgments about the growth and development of children. In appraising attitudes, values and feelings, the Remmers' multipurpose scales, such as, "A Scale for Measuring Attitude Toward Any School Subject," may be of some value.

In the area of interests there are practically no standard inventories available at the elementary school level. In the area of personal-social adaptability there are some standardized self-descriptive personality tests and rating scales. Both these methods should be used with caution because both self-ratings and ratings by others may contain serious errors of observation and measurement. Even when such measures are used it is wise to supplement the data from them by making systematic observations and anecdotal records of the pupil's behavior. In addition, data may be obtained from sociometric techniques to aid in making more accurate interpretation of the pupil's social behavior and relationships.

¹ National Society for the Study of Education. *The Measurement of Understanding*. Forty-Fifth Yearbook. Chicago: University of Chicago Press, 1946.

Teacher-Made Inventories

Interests may perhaps be best defined, for purposes of this article, as those drives which lead the individual to various preferences in personal efforts and conduct. An informal interest inventory of activities may be used to discover pupil preferences. Sample items follow:

	L	I	D
(a) To listen to radio news commentators	()	()	()
(b) To draw pictures	()	()	()
(c) To play the piano	()	()	()
(d) To read about trains and railroads	()	()	()

L means like; I means indifferent to; D means dislike.

Individual beliefs and attitudes toward ideas, persons and phenomena may be measured by an informal attitude test especially constructed for use with local school children. In such a test the pupil is asked to indicate by + or - whether he agrees or disagrees with such statements as these:

- () The farmer is less happy than the city worker.
- () The government should help persons who are too old to work.

Anecdotal Records

In compiling the anecdotal records, the observer makes notes of sample situations, activities, experiences and expressions of each pupil for the characteristic or characteristics to be evaluated. Thus, for example, an anecdotal record containing descriptions of behavior aids in assessing personal-social adaptability. The following are excerpts about Jane from a teacher's anecdotal record.

- 9-11-61 Jane cried when she failed to solve an arithmetic problem correctly.
- 9-18-61 Shoved (without provocation so far as I can determine) Ruth who was standing nearby.

10-3-61 Refused to take part in an arithmetic project because she was not chosen as chairman of the committee to plan and write it.

10-9-61 Used ridicule to belittle Mary, a classmate, who brought in a long report on an arithmetic project. (She has shown jealousy before.)

It is necessary to have an adequate number and sequence of anecdotal entries upon which to base judgments and interpretations of a child's behavior. Some children need more entries than others.

Sociometric Techniques

A common sociometric technique is that involving the choice of classmates as friends. This instrument is a friendship-choice type in which the following sociometric question is asked:

1. Who are your best friends in this class? Name one, two, three or more as you like.

From the children's responses to the sociometric question, it is possible to draw up a table of choices for a class as follows: (a) children chosen by each child as friends; (b) children choosing other children as friends; (c) mutual choices as friends; and (d) children not chosen by any other child.

Another sociometric method involves choosing classmates who are naturally suited for roles in class plays. This device is a variation of the "Guess Who" method used years ago by investigators. This instrument, a pupil questionnaire, is called "Casting Characters for Class Plays." Each pupil in the class is asked to write the name of the classmate who is best suited to play a particular part in a class play because he behaves that way naturally. Sample items are:

1. Someone who is always in good humor; who laughs or smiles a good deal; who makes others happy

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California Teachers Association's supporting document³

The Council for Basic Education's policy statement in reply⁴

The *Phi Delta Kappan's* special feature summarizing the conflict.⁵

The original survey report, conducted by eight university academicians, provided the impetus for a system-wide re-evaluation of educational goals, as well as an examination of content and school practices in San Francisco. (The Superintendent's Curriculum Strengthening Program began two years before the presentation of the University Survey report.)

This presently reviewed document reports a three-year study by teachers, supervisors and administrators. This comprehensive review of the curriculum, from kindergarten through grade 12, attempts to provide a set of "Basic Expectations" balanced with consideration for individual differences in ability, interest and talent.

As Superintendent Spears' introduction states, ". . . while this stabilization has been effected, the spirit that has been engendered among the teachers is not a lock-step procedure that would disregard the intellectual integrity of teacher and pupil. Rather, it is one of city-wide standards and expectations plus classroom and school distinctiveness that places each pupil in his own right as an individual who should get the satisfaction of working up to his maximum. This is true of teachers as well."

³ California Teachers Association Commission on Educational Policy, *et al. Judging and Improving Schools: Current Issues*. Bulletin No. 6. Burlingame, California: the Association, 1960. 16 p.

⁴ Mortimer Smith, editor. "The Lines Are Drawn in California." *Council for Basic Education Bulletin*, Vol. V, No. 3; 1960. p. 1-4.

⁵ Special Feature on the "Conservative Revolution in California Education." *Phi Delta Kappan*, Vol. 42; No. 3; 1960. p. 89-112.

The program report (first volume) lists 23 major points for curriculum improvement, together with supporting documentation and guidelines. These points range from provision for lay readers to aid teachers of English, to plans for greater intellectual interchange between teacher and students, to giving greater intellectual challenge in primary grade reading materials.

The remaining five volumes (all in loose-leaf form) in the series comprise a basic set of course of study guides for San Francisco teachers as refined and reported by committees of their fellow teachers.

Other reports are anticipated from this program, as San Francisco teachers demonstrate their competence to improve and strengthen their curriculum and teaching processes without significant assistance from a group reporting "outside the field in which it has special competence."

—CURTIS P. RAMSEY, *Director, Learning Resources Center, George Peabody College for Teachers, Nashville, Tenn.*

Teacher-Made Tests

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2. Someone who is shy about meeting people, who prefers to work alone rather than with others

3. Someone who is snobbish and conceited, who feels superior to others in the class.

Similar items may involve choices of pupils for roles described as cooperative, industrious, dependable, friendly, and outstanding. Other items may ask for choices of roles described as poor loser, bookworm, and show-off.

The following statements provide a summary definition of the qualities by

which an effective program of evaluation may be judged:

1. Evaluation is comprehensive. The major objectives of instruction are evaluated by a variety of appraisal methods, including standardized tests and scales, but especially teacher-made tests, observations, questionnaires, anecdotal records, and sociometric techniques.

2. Evaluation is a continuous process. A teacher with a clear concept of instructional objectives evaluates throughout every day the behavior of the children.

3. Evaluation necessitates, on the part of the teacher, alertness and close observations in and out of the classroom.

4. Evaluation requires that the teacher interpret appraisal data in terms of the background, the level of maturity, and the personality of each child, for the purpose of guiding his growth and development.

Teacher Behavior

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5. T. N. FILSON. *Factors Influencing the Level of Dependence in the Classroom*. Unpublished Ph.D. thesis; University of Minnesota, 1957.

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7. N. A. FLANDERS. *Interaction Analysis in the Classroom; A Manual for Observers*. Lithographed. University of Michigan, 1960a. p. ii + 35.

8. N. A. FLANDERS. *Teacher Influence, Pupil Attitudes and Achievement: Studies in Interaction Analysis*. Final Report, Cooperative Research Project No. 397, U.S. Office of Education, 1960b. p. vi + 121.

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13. G. P. ROMNEY, M. M. HUGHES, et al. *Progress Report of the Merit Study of the Provo City Schools*. August 1958. p. xix + 226. See also: *Patterns of Effective Teaching: Second Progress Report of the Merit Study of the Provo City Schools*. Provo, Utah: the Schools; p. xii + 93. June 1961.

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16. E. M. J. WRIGHT and V. H. PROCTOR. *Systematic Observation of Verbal Interaction as a Method of Comparing Mathematics Lessons*. Final Report; Cooperative Research Project No. 816, U.S. Office of Education, 1961. p. viii + 233.

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