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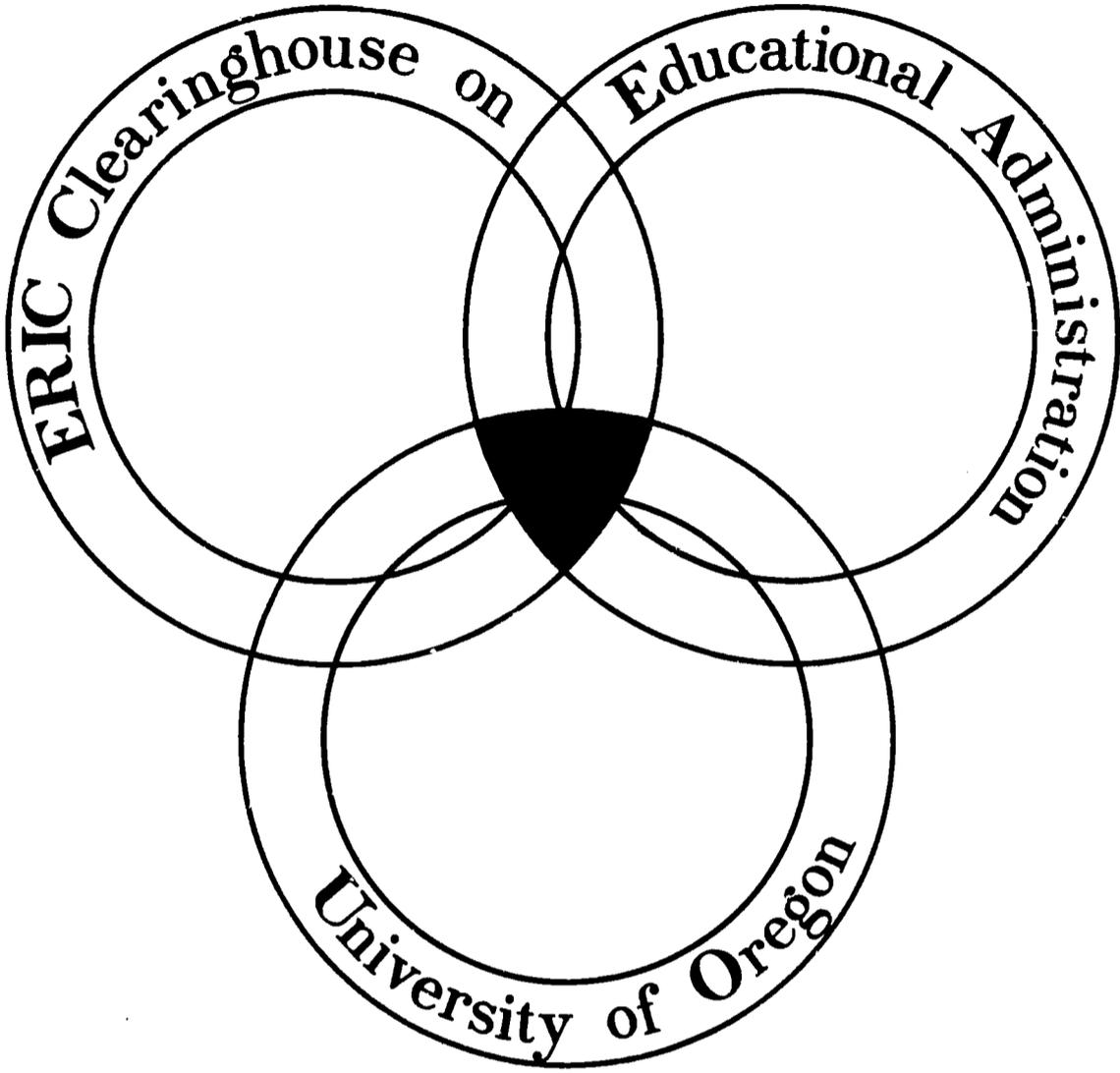
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Sixty-four books pamphlets, papers, and journal articles published, for the most part, between 1964 and 1968 are listed in this annotated bibliography on the evaluation of educational programs on the elementary, secondary, and higher education levels. Topics covered include the evaluation of school subject programs, vocational programs, State aid programs, curriculum, educational planning, Federal programs, teaching quality, educational change, and educational outcomes and quality. Some entries pertain to the development and use of mathematical models and cost-benefit analysis for evaluative purposes. Emphasis is on the methods, procedures, models, and exemplars of educational program evaluation. (TT)

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ANNOTATED BIBLIOGRAPHY ON
THE EVALUATION OF
EDUCATIONAL PROGRAMS

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Annotated Bibliography on the Evaluation of
Educational Programs

compiled and annotated by

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INTRODUCTION

The careful evaluation of educational programs has recently received much impetus from the enactment by Congress of legislation which requires that federally funded projects be meaningfully evaluated. In addition to the papers, reports, and journal articles stimulated and supported by federal grants, the more traditional sources, such as textbooks on educational measurement, continue to supply educators with methods, procedures, models, and exemplars of educational program evaluation.

Most of the literature emphasizes the need for careful identification of operationalized educational objectives which can be quantified by some behavioral indicator. While the accurate determination of educational outcomes remains a serious problem in evaluation, some progress has been made in developing mathematical models and cost-benefit analyses for evaluative purposes.

In preparing this bibliography, an attempt has been made to cite significant documents published, for the most part, since 1964. Although a few documents, such as AERA papers, may be difficult to obtain, most are readily available from university and public libraries or from the ERIC Document Reproduction Service (EDRS). If a document is available from EDRS, its order number and prices are included in parentheses at the end of the citation.

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Terry L. Eidell

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BOOKS, PAMPHLETS, AND PAPERS

A suggested checklist for assessing a science program. Washington, D. C.: U. S. Government Printing Office (Report No. OE-29034-A), 1964. Pp. 20. (EDRS: ED 013 755; \$.25 MF, \$.88 HC).

Includes suggestions and a checklist for the evaluation of elementary and secondary school science programs. Explanations for the construction and use of a program profile and the use of the checklist are provided as are a three-point rating scale and a form for the development of a composite profile.

Abt, C. C. A cost-effectiveness model for the analysis of Title I ESEA project proposals, Part I-VII. Cambridge, Massachusetts: Abt Associates, Inc. (Report No. TN 14-20), 1966. Pp. 122. (EDRS: ED 013 281; \$.50 MF, \$4.96 HC).

Seven separate reports present an overview of a cost-effectiveness model and five submodels for evaluating the effectiveness of ESEA Title I proposals. The model represents an attempt at the quantitative description of educational systems so that they may be programmed as computer simulations to indicate the impact of a Title I project on the school, the students, and the community.

Alkin, M. C. Towards an evaluation model — a systems approach. Los Angeles, California: University of California, Center for the Study of Evaluation of Instructional Programs (Report No. WP-4), 1967. Pp. 27. (EDRS: ED 014 150; \$.25 MF, \$1.16 HC).

Develops a model for evaluating instructional programs at the school district level. The model consists of six main elements: Student inputs, financial inputs, external systems, mediating factors, student outputs, and nonstudent outputs.

Annas, P. A. and others. Guide to assessment and evaluation procedures, the New England educational project. 1966. Pp. 37. (EDRS: ED 012 087; \$.25 MF, \$1.48 HC).

Prepared to guide local school systems in evaluating ESEA and other projects, this workbook gives a step-by-step process for evaluation. A glossary of terms is included.

Ashcraft, R. The effect of the high school curriculum upon college achievement. Paper presented at the AERA Annual Meeting, Chicago, Illinois, 1968.

Compares the effects on college achievement of two different high school curricula, college preparatory and noncollege preparatory. Data presented tend to indicate that the high school background does not predetermine college performance and that it is less decisive to college achievement than general intelligence and nonintellective factors.

Barkin, D. The equalizing impact of state aid to education. St. Louis, Missouri: Washington University, Institute for Urban Studies (Report No. WP-EDA-3), 1967. Pp. 25. (EDRS: ED 013 501; \$.25 MF, \$1.08 HC).

Investigates State aid-to-education programs in Kentucky, Missouri, and Tennessee with respect to their compensation for differences in the ability of local school districts to support education. A hypothetical aid formula was used as a standard against which to measure the present equalization scheme in each of the three States.

Burton, G. L. and Schraeder, M. The search for comparisons in the evaluation of a curriculum development project. Paper presented at the AERA Annual Meeting, New York, New York, 1967.

The evaluation of new educational programs is said to require research decisions even though the primary goals of such programs are not research. This paper describes a three-year development project in Wisconsin involving approximately 20 school systems.

Caldwell, M. S. Input evaluation and educational planning. Columbus, Ohio: Ohio State University, Evaluation Center, College of Education, 1968. Pp. 20. (Will be available from EDRS after May 1969).

Suggests a procedural framework within which educational programs, regarded as inputs, may be developed to achieve outputs of desired change and improvement, with eight criteria for assessment of plans and strategies.

Cox, R. C. The evaluation of dependent variables in a new instructional system. Paper presented at the AERA Annual Meeting, New York, New York, 1967.

Stresses the importance of identifying dependent variables by reference

to goals in evaluating an innovation. Data are provided showing that different definitions of the dependent variable produce distinctly different results.

Criteria for evaluation of vocational-technical schools of Connecticut. 1966. Pp. 205. (EDRS: ED 016 780; \$1.00 MF, \$8.28 HC).

Provides guidelines and criteria for the evaluation of the overall program of a vocational-technical school. Philosophy, objectives, and checklists consisting of provisions, conditions, or characteristics found in good vocational-technical schools are presented. Forms for a summary and conclusion of the evaluation are included.

Davie, B. F. Using benefit-cost analysis in planning and evaluating vocational education. 1965. Pp. 20. (EDRS: ED 016 077; \$.25 MF, \$.88 HC).

Discusses the analysis of vocational education by rational resource allocation and lists some limitations of benefit-cost analysis for evaluating vocational education programs. The appendix contains a formulation of this benefit-cost analysis system.

Dressel, P. L. and others. Evaluation in higher education. Boston, Mass.: Houghton Mifflin Company, 1961. Pp. 480.

Eleven authors treat 13 aspects of evaluation relating to college and university educational programs, including the nature and objectives of evaluation, procedures for evaluating particular departmental programs, and institutional self-evaluation.

Educational Testing Service. On evaluating Title I programs. Princeton, N. J.: E. T. S., 1966. Pp. 143. (Will be available from EDRS after May 1969).

Abridged proceedings of a workshop held April 11-15, 1966, at Princeton and attended by 39 participants from 24 states. Fourteen papers and four discussion excerpts present the workshop's four main foci: (1) Title I educational objectives and the role of evaluation, (2) Selecting and developing evaluation instruments, (3) Designing and interpreting the results of evaluation studies, and (4) Problems and solutions.

Evaluation strategies for ESEA Title I projects. Paper presented at the American Personnel and Guidance Association Convention, Dallas, Texas, March 1967. Pp. 7. (EDRS: ED 013 476; \$.25 MF, \$.36 HC).

Differentiates between evaluation of projects and of programs. Project

evaluation is said to consist of product assessment focusing upon change in the target pupil or school and of process evaluation monitoring project conditions. Program evaluation assesses not only change in target pupils or schools, but also, the total impact which is an outcome of combined projects or treatments.

Fulton, W. R. Self evaluative checklist and criteria for evaluating educational media programs. Washington, D. C.: USOE Bureau of Research (Report No. BR-5-0304), 1966. Pp. 137. (EDRS: ED 010 116; \$.75 MF, \$5.48 HC).

Describes the development of two forms of a self-evaluative checklist. One form is to be used for evaluating educational media programs in higher education institutions and the other is intended for use in public school systems. Instruments and recommendations for use are included.

Guba, E. G. Evaluation in field studies. Paper presented at evaluation conference sponsored by the Ohio State Department of Education, Columbus, Ohio, June 1965. Pp. 29.

Suggests six strategies for developing new methods to evaluate naturalistic or nonexperimental field studies, especially projects processed under terms of the Education Act of 1965.

Hammond, R. L. Evaluation at the local level. 1967. Pp. 18. (EDRS: ED 016 547; \$.25 MF, \$.80 HC).

Presents a model for the evaluation of educational innovations.

Harrison, R. Problems in the design and interpretation of research on human relations training. Paper presented at the research seminar of the Veteran's Administration Hospital, West Haven, Connecticut, January 1967. Pp. 26. (EDRS: ED 011 369; \$.25 MF, \$1.04 HC).

Reviews problems in designing and interpreting research and evaluation of human relations training projects. Problems considered include (1) controls, (2) temporal change, (3) dimensions and directions of change, (4) classification schemes of outcomes, (5) trainer variations, and (6) statistical problems.

Jacobs, J. N. and others. Evaluation of the impact of Title I of the Elementary and Secondary Education Act in the Cincinnati public schools. Cincinnati, Ohio: Cincinnati Public Schools, 1967. Pp. 102. (EDRS: ED 013 284; \$.50 MF, \$4.16 HC).

Reports the effects of the first year's operation of various ESEA Title I

compensatory education projects on a disadvantaged population in Cincinnati. Only variables which are empirically observable are studied.

Kleinmann, J. H. Profiles of excellence, recommended criteria for evaluating the quality of a local school system. Washington, D. C.: National Education Association, 1966. Pp. 128.

Presents 119 brief evaluative questionnaires in nine sets designed to provide local school district personnel with an instrument for comprehensive self-analysis of their school system's operation.

Lindvall, C. M. and Cox, R. C. A rationale and plan for the evaluation of the individually prescribed instruction project. Paper presented at the AERA Annual Meeting, New York, New York, February 1967. (mimeographed).

Explains the design used for evaluation of individualized instruction programs in grades K through six at Pittsburgh's Learning Research and Development Center and other school systems throughout the country. Both formative and summative aspects of evaluation are outlined, including procedures for gathering evaluative information and the assessment of independent and dependent variables.

McIntosh, T. A. and Perkins, B. Evaluation of teacher competency in team teaching. Honolulu: University of Hawaii, 1964. Pp. 106.

Discusses a rationale for the evaluation of team teaching programs and describes six instruments for the evaluation of teacher competency in team teaching.

MacLennan, B. W. and Levine, M. S. Evaluation issues in programs for disadvantaged children, the use of non-test procedures. Pp. 12. (EDRS: ED 014 759; \$.25 MF, \$.56 HC).

Outlines the dimensions of program evaluation, describes some nontest methods which can be used, and stresses the importance of monitoring and controlling an intervention. The value of teamwork between evaluators and interventionists in furthering the clear conceptualization and refinement of programs is discussed.

McQueen, M. Foreign languages in our schools. Part I, Changes and developments. Part II, Research, methods, and measurement. Part III, Solving problems. 1966. Pp. 12. (EDRS: ED 014 245; \$.25 MF, \$.56 HC).

Included in Part II of this report are a discussion of critical reaction to development in foreign language programs, an analysis of the role of the

foreign language teacher, a comparison and evaluation of new and old methodologies, and an exploration of theories and realities in selection and measurement techniques.

Merriman, H. O. Evaluation of planned educational change at the local education agency level. Columbus, Ohio: Ohio State University, Evaluation Center, College of Education, 1967. Pp. 13. (Will be available from EDRS after May 1969).

Describes and orders components of a four-stage system assessment model, CIIP, comprised of context, input, process, and product evaluation.

Metfessel, N. S. and Michael, W. B. A rationale including multiple criteria for the evaluation of the objectives of school programs. Paper presented at the AERA Annual Meeting, New York, New York, February 1967. (mimeographed).

Gives six key steps for the evaluation of federally sponsored school programs, including development of a model of goals arranged in a hierarchical order, translation of objectives into operational terms, and measuring instruments to be employed. Over 70 criteria are listed for use in program assessment.

Miller, D. R. Planning, developing and implementing Title III, ESEA projects. Burlingame, California: Operation PEP, 1968. Pp. 92.

Five strategies are outlined for the development of a systems approach to the planning and management of Title III, ESEA projects. A model of procedures is developed as a simulation tool to approximate alternative solutions for selected objectives.

National study of secondary school evaluation. Evaluative criteria for junior high schools. Washington, D. C.: NSSSE, 1963. Pp. 380.

A basic manual describing criteria for evaluating public junior high schools. Contains guidelines for self-evaluation of the school by the school's staff and procedures for evaluating the school's philosophy, objectives, functions, community relationships, program of studies, special services, staff and administration, and facilities.

Neidt, C. O. and French, J. L. Guide to evaluation of Title I projects. Draft information copy. Washington, D. C.: Office of Education, 1966. Pp. 120. (EDRS: ED 015 224; \$.50 MF, \$4.88 HC).

Prepared for the use of local educational agencies in collecting data and

formulating designs to evaluate ESEA Title I projects for disadvantaged pupils. These guidelines discuss desirable characteristics of tests and the use of standardized tests and supplementary evaluative techniques. They also describe several procedures for analyzing evaluation data.

Nunnally, J. C. Educational measurement and evaluation. New York: McGraw-Hill Book Co., 1964. Pp. 440.

A comprehensive textbook on measurement and evaluation of curricula for teachers in elementary and secondary schools. The book includes (1) general principles of measurement and evaluation, (2) the construction and use of teacher-made tests, (3) the construction and use of commercially distributed achievement tests, (4) the measurement of intelligence and special aptitudes, and (5) the measurement of attitudes, interests, and personality. Tests are seen as helpful only to the extent that they help in making educational decisions.

Provus, M. M. and others. "The Pittsburgh Evaluation Model," Chapter I, ESEA Title I projects evaluation report, 1967 — volume I. Pittsburgh, Pennsylvania: Pittsburgh Public Schools, 1967. Pp. 1-38. (Will be available from EDRS after May 1969).

Describes a four-stage sequential evaluation procedure for both assessment and improvement of educational programs. A rationale and description are given for specific phases in the evaluation process, including program definition, stage review, feedback, and problems inventory.

School program evaluation. Pp. 6. (EDRS: ED 011 460; \$.25 MF, \$.24 HC).

Written for the Texas Small Schools Project, this document outlines general guidelines, types of information to gather, and evaluation procedures which might be used by any small school.

Scriven, M. The methodology of evaluation. Washington, D. C.: USOE Bureau of Research (Report No. BR-5-0619), 1966. Pp. 61. (EDRS: ED 014 001; \$.50 MF, \$2.52 HC).

Explicates some of the philosophical and practical deficiencies of current conceptions of how educational instruments should be evaluated and shows ways of reducing these deficiencies. The main focus of the paper is on curriculum evaluation, but, in the author's opinion, almost all the points made transfer immediately to other kinds of evaluation. This paper was written for the Social Science Education Consortium.

Seashore, C. N. Regional meetings in evaluation research, final report. Washington, D. C.: USOE Bureau of Research (Report No. BR-6-1382), 1966. Pp. 24. (EDRS: ED 010 229; \$.25 MF, \$.96 HC).

Reports on nine research training meetings conducted for state education department personnel involved in evaluation of ESEA projects.

Spielgelman, R. G. and others. Cost-benefit model to evaluate educational programs. Progress report. Menlo Park, California: Stanford Research Institute, 1967. Pp. 224. (EDRS: ED 012 828; \$1.00 MF, \$9.04 HC).

Reports progress on developing a framework for the evaluation of educational programs. The mathematical model being developed is said to provide a means for evaluating the monetary benefits from ESEA Title I programs.

Stufflebeam, D. L. Evaluation as enlightenment for decision-making. Columbus, Ohio: The Ohio State University, The Evaluation Center, 1968. Pp. 48.

Describes the state of the art in evaluation of educational programs and defines major problems involving a lack of adequate evaluation theory, a lack of appropriate evaluation instruments and procedures, and a lack of trained evaluators. The nature of evaluation in education is defined, a rationale for the evaluation of federally assisted programs is developed, four strategies for evaluating educational programs are explicated, and a general guide is given for structuring evaluation designs.

Stufflebeam, D. L. Evaluation under Title I of the elementary and secondary educational act of 1965. Columbus, Ohio: The Ohio State University, Evaluation Center, College of Education, 1966. Pp. 23. (Will be available from EDRS after May 1966).

Discusses evaluation as a primary and recurring element in the change process, defines evaluation as a procedure for obtaining data to make decisions on three administrative levels (federal, state, and local), and makes six recommendations for implementation of evaluation.

Suchman, E. A. Evaluative research. New York: Russell Sage Foundation, 1967. Pp. 186.

The current status of program evaluation, its history, primary concepts and principles, procedures, design, measurement effects, administration, and experimental aspects are discussed as related especially to large government programs utilizing behavioral science concepts and methods

for meeting social problems. Extensive notations refer primarily to the evaluation of programs in the field of public health.

The feasibility of cost/effectiveness analysis for Title I, public law 89-10. Final report. Washington, D. C.: USOE Bureau of Research (Report No. BR-6-1686), 1966. Pp. 185. (EDRS: ED 013 270; \$.75 MF, \$7.48 HC).

Reports an investigation on the feasibility of cost-effectiveness technology as it may be applied to decisions about money spent on education. The report lists prerequisites which should be met in order for evaluation efforts to be successful.

Tuckman, B. W. The development and testing of an evaluation model for vocational pilot programs. Final report. 1967. Pp. 104. (EDRS: ED 016 083; \$.50 MF, \$4.24 HC).

Reports on a project planned to develop an evaluation model in the form of a how-to-do-it manual. The manual outlines procedures for measuring the degree to which a pilot program achieves its stated final objectives. The project was also planned to evaluate this model by using it in the evaluation of ongoing pilot programs, and to conduct a clinic for the dissemination of this information. A "Manual for Evaluating Educational Programs — the Check Technique," is included.

Tyler, R. W., Gagne, R. M., and Scriven, M. Perspectives of curriculum evaluation. Chicago, Illinois: Rand McNally & Co., 1967. Pp. 102.

Tyler discusses the issues and possible solutions to problems involved in assessing the progress of education. Gagne describes a procedure for analyzing curriculum tasks and constructing related learning sequences, and includes a number of research references demonstrating the application of the analytic procedures discussed. Scriven proposes a methodology of evaluation. An extensive bibliography is appended.

Unks, N. J. and Cox, R. C. A model for the evaluation of a testing program. Paper presented at the American Educational Research Association Annual Meeting, Chicago, Illinois, February 1968. Pp. 9. (EDRS: ED 017 023; \$.25 MF, \$.44 HC).

Argues that the evaluation of a total project may depend upon the testing subprogram developed and that if the testing subprogram is something less than adequate, the evaluation of the total project may be suspect. A model is proposed for evaluating a testing subprogram.

Vogel, F. X. and Bowers, N. D. Pupil achievement attitude and behavior in a multi-age non-graded school. Paper presented at the AERA Annual Meeting, Chicago, Illinois, 1968.

Compares pupil classroom behaviors that are developed in the traditional form of school organization to those developed in the nongraded form. The nongraded form is reported to encourage pupil development in conceptual maturity and participation in group activities while the graded form is reported to encourage pupil development in measures such as achievement and attitudes toward school.

Wilhelms, F. T. (Ed). Evaluation as feedback and guide. Washington, D. C.: Association for Supervision and Curriculum Development, National Education Association, 1967 Yearbook. Pp. 283.

Eight members of the yearbook committee develop the concept of evaluation as a process (whether or pupil, teacher, or school system) with the ultimate purpose to provide feedback for maximum teacher effectiveness and student learning.

JOURNAL ARTICLES

Abramson, D. A. Curriculum research and evaluation. Review of Educational Research, 36 (June 1966), 388-395.

Contributions of over a dozen writers are briefly reviewed in an emphasis on clarifying the specific role of curriculum research and evaluation. Points stressed include the need to specify objectives and the importance of resolving misunderstandings over procedures which have led to unrealistic distinctions between research and evaluation in curriculum development.

Carnegie Corporation of New York. The gross educational product: how much are students learning? Carnegie Quarterly, 14 (Spring 1966), 1-4.

Stresses the need for a national assessment of education as carried out in the Northeast, South, Midwest, and Far West, to provide a measurement base for realistic nationwide educational improvement.

Correa, H. Basis for the quantitative analysis of the educational system. Journal of Experimental Education, 35 (Fall 1966), 11-18.

A system of quantitative indices for education is proposed, with elements considered as stocks and flows. Elements considered include: (a) A timetable comprising number and length of instructional periods and content of subjects taught and learned, (b) teachers and administrative personnel, (c) buildings and other facilities, and (d) students. Statistical formulas are developed to permit quantitative analysis of relationships between specific variables.

Cronbach, L. J. Course improvement through evaluation. Teachers College Record, 64 (May 1963), 672-683.

Defines evaluation as the collection and use of information to make decisions about an educational program, whether implications are national, local or individual, and calls for a deeper understanding of testing, comparing, and other relevant aspects of course evaluation and curriculum development.

Fleck, A. C., Jr. Evaluation as a logical process. Canadian Journal of Public Health, 52 (May 1961), 185-191.

From experience in evaluating public health programs, develops a set of basic evaluation principles, including: (1) Evaluation is a logical process

which has no end, (2) programs seek to achieve three types of goals — community, administrative, and intrinsic, and (3) appraisal of benefits as related to costs is more common at the planning stage of new programs than it is in established programs.

Knowell, D. M. New York challenges its urban colleges. Junior College Journal, 37 (March 1967), 9-11.

Reports the results of interviews with noncollege-bound high school seniors and college dropouts in New York City. The need for an extension of educational services for disadvantaged youth is indicated.

Krebs, A. H. Guiding principles for evaluation under the Vocational Education Act of 1963. The Agricultural Education Magazine, 37 (April 1965), 238-239. (EDRS: ED 015 325; \$.25 MF, \$.20 HC).

Sixteen guidelines for planning and conducting evaluation were obtained from references to evaluation in the Vocational Education Act of 1963. The author argues that teachers, supervisors, and administrators of vocational agriculture programs should develop and implement a sound philosophy of continuing evaluation at the local, state, and national levels to provide information on program results.

Lindvall, C. M. The task of evaluation in curriculum development projects — a rationale and case study. The School Review, 74 (Summer 1966), 159-167.

Describes the evaluation program developed for the Curriculum Continuity Demonstration, a USOE Bureau of Research project conducted jointly by the University of Pittsburgh and the Pittsburgh Schools. The rationale developed may serve as a guide for other evaluative efforts.

Perkins, H. V. Federal participation and its results. Educational Leadership, 24 (October 1966), 39-45.

Reviews three types of educational programs involving federal participation and suggests five criteria for the evaluation of such programs. The programs reviewed include project Head Start, projects dealing with mental health, and educational research projects.

Rudman, H. C. National educational assessment. Educational Administration Quarterly, 3 (Spring 1967), 115-129.

The author argues that unless we distinguish between education, on the one hand, and schooling or pedagogy, on the other, we will find it difficult

to discuss intelligently those elements of an educational program that lend themselves to evaluation and those which do not. It is pointed out that an effectiveness score cannot be derived for education broadly conceived so long as the school remains the sole focus of a national assessment program.

Sawin, E. I., and Maj. Smith, J. F. Curriculum evaluation. Improving College and University Teaching, 14 (Spring 1966), 81-86.

Outlines procedures and describes philosophy for evaluation of the Air Force ROTC program, emphasizing leadership training, on 186 campuses throughout the United States. The evaluation design may be applied to small as well as large nonmilitary educational programs, where assessment of outcomes is feasible.

Schlesinger, L. E. and others. Federal program evaluation. Nation's Schools, 77 (May 1966), 50-71.

A special issue devotes three sections to the evaluation of federal programs: (1) An explanation of requirements for school district reports of Title I projects, including five evaluative designs, (2) five case studies outlining philosophies and procedures, and (3) a description of evaluation tools — tests, charts, graphs, and statistics.

Sexson, J. E. A search for values in evaluation. Improving College and University Teaching, 13 (Spring 1965), 118-119.

Declares that teacher evaluation of student learning should be based not on unrealistic biases but on a logical set of values inherent in current philosophic systems, including realism, pragmatism, and idealism.

Sommerfield, R. E. Philosophy for evaluation: the improvement of instruction. High School Journal, 48 (April 1965), 434-438.

Reviews eight basic evaluation assumptions from Smith and Tyler's eight-year study of student progress. Stresses the importance of developing evaluation procedures based on educational objectives, framed in terms of changes in pupil behavior, with special implications for curriculum planning and development.

Sorenson, G. A new role in education: the evaluator. UCLA Evaluation Comment, 1 (January 1968), 1-4.

Sees the evaluator in education as a new professional who bridges the gap

between the university educational laboratory and the teaching field, helping teachers and administrators to define their goals and to appraise their pupils, making possible the development of instructional programs which will result in maximum learning for each student.

Stake, R. E. The countenance of educational evaluation. Teachers College Record, 68 (April 1967), 523-540.

Emphasizes the need for both descriptive and judgmental evaluation of educational programs, requiring analysis of three bodies of information, distinguished as antecedent, transaction, and outcome data. Matrix and flow charts illustrate the evaluation process.

Stufflebeam, D. L. A depth study of the evaluation requirement. Theory Into Practice, 5 (June 1966), 121-133.

In a special issue devoted to the Elementary and Secondary Education Act of 1965, evaluation is presented as a corollary of each of the four primary phases of the change process: research, development, diffusion, and adoption. Process and decision functions are illustrated by a feedback control loop with steps outlined for the evaluation of local, state, and federal project operations. Nine ways to improve evaluation of educational programs are recommended.

Stufflebeam, D. L. Toward a science of educational evaluation. Educational Technology, 8 (July 30, 1968), 5-12.

Defines evaluation as the provision of information through formal means to serve as rational bases for making judgments in decision situations. Evaluation methodology includes the collecting, organizing, analyzing, and reporting of information, in addition to the initial focusing of the evaluation and the subsequent administration of the evaluation. Four strategies for evaluating educational programs (context, input, process, product) are distinguished by objective, method, and relation to decision making.

Thurston, R. L. Education at the top of government. Political Science Quarterly, 81 (June 1966), 251-273.

Describes and appraises the present federal system of education for senior officials, including the war colleges, the Foreign Service Institute, and the interagency training programs of the Civil Service Commission. The author proposes a "National College of the United States" to more adequately meet the educational demands at the highest levels of government.

Tyler, R. Assessing the progress of education. Phi Delta Kappan, 47
(September 1965), 13-16.

Describes the basic rationale of a project to investigate the progress of American education, as distinct from achievement testing of individual pupils. Regional and age-group comparisons are developed from samples of children, youths, and adults, assessed according to eight procedural specifications.