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ABSTRACT

ERIC abstracts on Planning, Programming, Budgeting Systems (PPBS), announced by this and other clearinghouses in RIE through April 1973, are presented. The key terms used in compiling this collection are "Program Budgeting," "Program Planning," and "Systems Approach." The documents concern both the philosophies and the practices of PPBS, and include models, procedures manuals, and bibliographies. The following information is presented for each document: personal or institutional author, title, place of publication, publisher, publication date, number of pages, ERIC document ("ED") number, price of the document if it is available from the ERIC Document Reproduction Service, and the abstract. The documents are numbered and listed alphabetically by the authors' last names. A subject index refers to the document listing number. The subject terms, arranged in alphabetical order, are identical to those contained in the subject index of RIE. (Author)

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PREFACE

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The ERIC Clearinghouse on Educational Management, one of several clearinghouses in the system, was established at the University of Oregon in 1966. The Clearinghouse and its companion units process research reports and journal articles for announcement in ERIC's index and abstract bulletins.

Research reports are announced in Research in Education (RIE), available in many libraries and by subscription for \$38 a year from the United States Government Printing Office, Washington, D. C. 20402. Most of the documents listed in RIE can be purchased through the ERIC Document Reproduction Service, operated by Leasco Information Products, Inc.

Journal articles are announced in Current Index to Journals in Education. CIJE is also available in many libraries and can be ordered for \$44 a year from Macmillan Information, 866 Third Avenue, Room 1126, New York, New York 10022. Annual and semiannual cumulations can be ordered separately.

Besides processing documents and journal articles, the Clearinghouse has another major function—information analysis and synthesis. The Clearinghouse prepares bibliographies, literature reviews, state-of-the-knowledge papers, and other interpretive research studies on topics in its educational area.

The ERIC Abstracts series is the result of a cooperative arrangement between the Clearinghouse and the National Academy for School Executives (NASE) of the American Association of School Administrators. The Clearinghouse compiles the abstracts from document resumes in Research in Education to provide participants in a series of NASE-sponsored seminars with an up-to-date collection of ERIC materials on subjects to be presented in these seminars. Additional copies of the abstracts are published by NASE and distributed across the country to school administrators and others interested in educational administration.

Philip K. Piele
Director, ERIC Clearinghouse
on Educational Management

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INTRODUCTION

Since the beginning of ERIC in 1966, more than sixty thousand documents have been announced in ERIC's monthly catalog, Research in Education (RIE). Of the total, about five thousand documents have been processed by this Clearinghouse. This growing collection is so extensive that it is useful to compile lists of ERIC documents on a number of critical topics in educational management. Published separately, these selected lists of documents make up the ERIC Abstracts series.

To compile each list, the RIE subject indexes are searched, using key terms that define the topic. The documents are selected on the basis of their currency, significance, and relevance to the topic.

For this compilation on planning, programming, budgeting systems (PPBS), the index terms used are PROGRAM BUDGETING, PROGRAM PLANNING, and SYSTEMS APPROACH. The documents concern both philosophies and practices of PPBS, including models, procedures manuals, and bibliographies. The listing is complete for all issues of RIE through April 1973 and includes documents processed by this and other clearinghouses.

Based on the document resumes in RIE, the following information is presented for each document: personal or institutional author, title, place of publication, publisher, publication date, number of pages, ERIC document ("ED") number, price of the document if it is available from the ERIC Document Reproduction Service, and the abstract. The documents are listed alphabetically by author and are numbered.

A subject index, beginning on page 16, refers to the document listing number. The subject terms, arranged in alphabetical order, are identical to those contained in the subject index of RIE.

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1. Alioto, Robert F., and Jungherr, J. A. Operational PPBS for Education. A Practical Approach to Effective Decision Making. Series in Administration. 1971. 325 pages. ED 060 532 Document not available from EDRS. (Available from College Department, Harper and Row, Publishers, Inc., 49 East 33rd Street, New York, New York 10016. \$10.95.)

This book provides a practical approach for the introduction and installation of a planning, programming, budgeting system (PPBS). The first section describes the components necessary for operational PPBS, suggests methods of achieving those components, and illustrates risks and problems in the developmental process. The second section provides a comprehensive example, through a procedures manual and a display document, of how to collect, analyze, and display information necessary for viable PPBS. The third section includes representative samples of various forms and other materials developed by school districts to facilitate implementation of PPBS. The authors stress involvement of staff, community, and board members throughout the installation process. They advise districts to begin with existing information and procedures, and they alert practitioners to the necessity of realistic expectations during installation. The numerous techniques and strategies described provide a basis for evolving PPBS suitable to the needs of individual school districts.

2. California State Department of Education. Conceptual Design for a Planning, Programming, Budgeting System for California School Districts. Preliminary. Sacramento, California: 1969. 68 pages. ED 036 124 MF \$0.65 HC not available from EDRS.

The PPBS design in this manual provides information necessary for planning educational programs to meet community needs and for choosing among alternative methods of resource allocation to achieve desired goals and objectives. The design was developed to assist California school districts in utilizing money, manpower, and materials more efficiently. It also facilitates assessment of state and district goal accomplishment. A bibliography is included.

3. Carpenter, Margaret B. Program Budgeting as a Way to Focus on Objectives in Education. 1969. 18 pages. ED 054 517 MF \$0.65 HC \$3.29.

This document discusses the role of educational objectives in the construction of a program budget. Primary objectives—those that support basic values and fulfill community needs—must be specified. Because primary objectives head the hierarchy of educational objectives and because they provide the format for the program budget, they are important to an understanding of a school district's purposes. The problems

of conflicting, competing, and interdependent objectives are given special attention.

4. Carpenter, Margaret B., and Haggart, Sue A. "Analysis of Educational Programs within a Program Budgeting System." Paper presented at American Association of School Administrators / National Academy for School Executives clinic, August 1969. 39 pages. ED 052 529 MF \$0.65 HC \$3.29.

Evaluating alternatives provides both the reason and the technique for program budgeting in educational planning. The program budgeting system allows systematic choice of a preferred course of action, and considers alternatives in the context of all other programs. Data from a developmental program in the San Jose Unified School District provide the basis for discussion of concepts, techniques, and problems in educational program analysis.

5. Curtis, William H. Educational Resources Management System. Final Report. Chicago: Research Corporation, Association of School Business Officials, 1971. 362 pages. ED 065 939 Document not available from EDRS. (Available from Director of Research, 2424 West Lawrence Avenue, Chicago, Illinois 60625. \$7.95, quantity discount.)

A project of the Association of School Business Officials resulted in the development of an educational resources management system (ERMS). The primary purpose of the project was to develop a conceptual design for an integrated system of planning, programming, budgeting, evaluating (PPBES) appropriate for local school districts. In an ERM system, outcomes in terms of learner progress are emphasized over input measures as means for evaluating the success of the system. This report includes a conceptual design and describes activities essential to each of the processes of the planning, programming, budgeting, evaluating system. The author also details staff development needs, the relationship of state and federal educational agencies to ERMS, possible implications for the future of an ERM system, and the role of analysis as a means of facilitating choices among alternative programs.

6. Doherty, Victor. Goals and Objectives in PPBS. Oregon: Portland Public Schools, 1970. 39 pages. ED 044 815 MF \$0.65 HC \$3.29.

The most critical activity in the planning, programming, budgeting system is the specification and use of goals and objectives. Program goals are desired outcomes. Program objectives are changes in or creation of program elements in a specified manner to improve the efficiency of a program. Since only programs, not goals, can be translated into resource requirements and objectives, the entire

system of planning, budgeting, and evaluating is dependent on the correct specification of program objectives. In a systems approach to education, programs can be classified as, for example, instructional, support and service, or management, according to their functions. The author includes examples of program objectives for various functions.

7. Durstine, Richard M., and Howell, Robert A. Toward PPBS: Program Budgeting in a Small School District. Newton, Massachusetts: New England School Development Council, 1970. 87 pages. ED 041 372 MF \$0.65 HC \$3.29. (Also available from New England School Development Council, 55 Chapel Street, Newton, Massachusetts 02160. \$2.00.)

A planning, programming, budgeting system designed and developed for the Milford, New Hampshire, school district reverses the traditional priorities of PPBS. The Milford system emphasizes budgeting first, programming second, and planning third. The budget is program-oriented rather than line item- or input-oriented. An introductory chapter outlines the background and application of PPBS. The planning, controlling, and evaluating phases of PPBS are not examined in detail. Appendixes include examples of budget, personnel, and enrollment accounting punch cards and a per-pupil budget summary.

8. Eidell, Terry L., and Nagle, John M. PPBS and Data-Based Educational Planning. Eugene: Center for the Advanced Study of Educational Administration, University of Oregon, 1970. 63 pages. ED 038 741 MF \$0.65 HC \$3.29.

The first part of this document defines PPBS, outlines the usual conceptualization of PPBS, discusses current pressure to adopt PPBS in public education, and reviews recent efforts at implementation. The second part deals with basic concepts of a systems model and explains three interrelated models in detail. The third part relates the three systems models to PPBS, refines the original conceptualization, and provides a framework used in the fourth part to discuss possible strategies for implementing PPBS.

9. El Dorado County Board of Education. Planning Programming Budgeting System: Fiscal Year 1971. Placerville, California: 1970. 149 pages. ED 047 355 MF \$0.65 HC not available from EDRS.

El Dorado County, California, initiated a planning, programming, budgeting system to increase the efficiency of human and financial resource allocations. This one-year progress report contains a statement of goals; charts of program structure; and descriptions, budgets, and financial plans for sixty-nine instructional and administrative programs.

10. Hagen, John. Program Budgeting. Los Angeles: Center for the Study of Evaluation, University of California, 1968. 57 pages. ED 038 742 MF \$0.65 HC \$3.29.

This document synthesizes literature on program budgeting in education and other fields. Material on schools is limited mainly to actual working budgets and reporting documents. Program budgeting practices differ, depending on the mission of an organization or school district. In industry, program budgeting is essentially comprehensive long-range planning related to departmental plans. Cost-benefit analysis reveals investment returns on expenditure choices. Applied to traditional school budgeting, program budgeting focuses on end-product activities based on expenditure choices. This method involves long-range planning rather than minute object-of-expenditure analysis. A 126-item bibliography is appended.

11. Haggart, Sue A. "The Program Structuring Aspect of PPB for Education." Paper presented at American Educational Research Association annual meeting, New York, February 1971. 14 pages. ED 052 524 MF \$0.65 HC \$3.29. (Also available from Reports Department, The Rand Corporation, 1700 Main, Santa Monica, California 95001. #P-4456, \$1.00.)

Goal-objective identification and development leads to the grouping of activities and support services to form specific programs. These programs are ultimately combined in a program structure. Thus, identification and development of goals and objectives are essential to laying the foundation for a forward-looking program structure not based on the status quo. The process of program structuring provides a format for the program budget and categorizes the activities of education into programs according to their contribution to meeting educational objectives. This planning achieves better educational results by utilizing resources more effectively.

12. Haggart, Sue A., editor. Program Budgeting for School District Planning. Santa Monica, California: The Rand Corporation, 1972. 298 pages. ED 061 654 Document not available from EDRS. (Available from Educational Technology Publications, Englewood Cliffs, New Jersey 07632. \$9.95.)

Program budgeting is more than a neat method of budgeting by program and consequently requires more than mere concentration on budgeting and accounting procedures. Program budgeting is basically a resource allocations system. It stresses setting objectives, grouping activities into programs to meet the objectives, identifying resources required by the programs, and measuring the effectiveness of the programs in meeting the objectives. The purpose of the program budgeting effort is to provide the organized data base for systematic selection of a preferred

course of action. Alternative programs are evaluated in terms of both their impact on present programs and their future consequences.

13. Haggart, S. A. , and Carpenter, M. B. Program Budgeting as an Analytical Tool for School District Planning. 1969. 7 pages. ED 052 528 MF \$0.65 HC \$3.29.

A fully developed planning, programming, and budgeting system comprises more than the program budget and its financial information. PPBS is a system of analysis intended to assist the decision-maker in choosing among alternative courses of action for school district programs. The most salient feature of PPBS is its usefulness as a general analytical tool for educational planning.

14. Hallack, Jacques. The Role of Budgets in Educational Planning. The Fundamentals of Educational Planning: Lecture-Discussion Series No. 44. Paris, France: International Institute for Educational Planning, United Nations Educational, Scientific, and Cultural Organization, 1969. 19 pages. ED 058 631 MF \$0.65 HC not available from EDRS.

The International Institute for Educational Planning (IIEP) developed teaching materials on educational planning from tape recordings, transcriptions, and summary notes of seminars, lectures, and discussions conducted by the IIEP in its training and research program. This instructional unit discusses budgeting as a method for rational management and concludes that a planning, programming, budgeting system is the most effective management tool currently available. PPBS combines activities associated with planning, budgeting, and alternatives appraisal.

15. Hartley, Harry J. "PPBS: A Systems Approach to Educational Accountability." Paper presented at Supervision of Instruction Symposium 3: Accountability and the Supervisor, April 1972. Columbus: Ohio State Department of Education. 19 pages. ED 064 802 MF \$0.65 HC \$3.29.

This paper discusses curricular-instructional implications of PPBS. The author describes the purposes of PPBS, proposes a feasible implementation strategy for local schools, and identifies potential pitfalls. He also formulates a possible role description for supervisors, identifies local schools using PPBS, and summarizes the current national status of PPBS in education.

16. Huff, Robert A. "Program Budgeting: Promise and Problems." Paper presented at 25th National Conference on Higher Education, Chicago, March 1970. Washington, D.C.: American Association for Higher Education. 4 pages. ED 040 672 MF \$0.65 HC \$3.29.

Planning, programming, budgeting systems have several advantages over conventional accounting systems, but conventional systems will still be necessary for day-to-day operations. PPBS relates cost to output and permits analysis of the effects of changing existing programs by identifying marginal costs. PPBS also allows institutions to develop plans and present requests for funding in terms of outputs rather than inputs. However, there are some problems with PPBS. Cost-benefit analysis is vital to PPBS, and the benefits or quality of individual programs remains a matter of subjective judgment. Educational institutions could fall into the trap of technocracy, in which economic analysts control decisions by the cost data they are able or willing to supply. Also, the cost of the operation may not be justified by the magnitude or kinds of decisions made on the basis of the new information. Although PPBS is no panacea, it can promote better management of scarce available resources.

17. Jenkins, William A., and Lehman, Greg O. PPBS and Its Implications for You. 1971. 5 pages. ED 061 615 MF \$0.65 HC \$3.29.

Implementation of a planning, programming, budgeting system of educational management affects teachers, legislators, and taxpayers, as well as administrators. Teachers bear a major responsibility for instructional improvement, and they can accomplish such improvement by writing behavioral (performance) objectives and planning instructional methods. Principals must coordinate the educational program as it relates to facilities. The design, development, and implementation of a PPBS model in a school district will not succeed without the strong leadership of the superintendent. Legislators must become accustomed to program budgeting and move away from line-item budgeting. Taxpayers, if accorded greater involvement in the budgeting process, could communicate more openly with administrators.

18. Keller, Harry. "Development and History of the Concept of PPB." Paper presented at Institute on Program Planning and Budgeting Systems for Libraries, Detroit, spring 1968. Detroit: Department of Library Science, Wayne State University. 22 pages. ED 045 113 MF \$0.65 HC \$3.29.

Program budgeting is an extension and refinement of budgeting processes developed during the last half century. This paper investigates the theory, philosophy, and techniques of the process and develops a conceptual framework for its use. The author traces the historical development of planning, programming, budgeting systems (PPBS) and lists program budgeting procedures. He also discusses the theory of and approaches to measurement of physical performance, defines discounted cash flow, and applies the discounted cash flow concept to PPBS.

19. Knezevich, S. J. "The Systems Approach to School Administration: Some Perceptions on the State of the Art in 1967." Paper presented at U. S. Office of Education Symposium on Operations Analysis of Education, Washington, D. C. , November 1967. 14 pages. ED 025 853 MF \$0.65 HC \$3.29.

Concepts that are salient features of the systems approach do not appear to have permeated school administration beyond the threshold of awareness. Confusion among administrators concerning the meaning and potential of the systems approach can be partly attributed to overzealous adherents, semantic difficulties among experts, and the application of the systems approach to minor, pedestrian problems. Experts must agree on standard meanings for such terms as systems analysis; program budgeting; planning, programming, budgeting systems (PPBS); and cost effectiveness. The potential of the systems approach for solving major administrative problems should be demonstrated and publicized through special seminars, conferences, and workshops. The systems approach necessitates a number of improvements in education: (1) a clearer definition of educational objectives, (2) use of models for at least portions of school operations, (3) development of quantitative reasoning and analysis capabilities, (4) greater emphasis on generating alternative solutions to problems, (5) an increase in school district staffs for planning and systems analysis, and (6) better dissemination of systems concepts and techniques.

20. Mansergh, Gerald G., editor. Curricular and Fiscal Planning with Planning, Programming, Budgeting Systems. Special Monograph No. 2. Michigan: Metropolitan Detroit Bureau of School Studies, Inc., 1969. 42 pages. ED 035 985 Document not available from EDRS. (Available from Metropolitan Detroit Bureau of School Studies, Inc., Wayne State University, 5029 Old Second Avenue, Detroit, Michigan 48202. \$1.25.)

Planning, programming, budgeting systems in education provide the means for formulating more precise curricular objectives and for coordinating curricular-fiscal planning. At the core of PPBS is the program budget, which reports programs to be accomplished and allocates expenditures. PPBS considers objectives related to student achievement rather than objects to be purchased. Program structure can be based on four approaches: subject matter, grade level, operating unit (individual school), or a hybrid of subject matter and grade level. The first phase of PPBS concerns the movement from planning to programming. This phase should include a clear statement of the school district's philosophy, a definite program format, and a list of educational objectives. The second phase is the transition from programming to budgeting. The output of the first phase consists of dollar figures for program expenditures and benefits. The budget makers verify these estimates in the second phase and, with figures on

total revenues, can provide information on the feasibility of all programs.

21. Maryvale Central School District. PPBS: Design of Selected Programming Elements. The Report of a Project Made at the Request of the Board of Education, Union Free District #2, Town of Cheektowaga. Cheektowaga, New York: 1970. 172 pages. ED 050 461 MF \$0.65 HC \$6.58.

A planning, programming, budgeting system is significant in its ability to improve educational planning and cost effectiveness. The Western New York PPBS project developed and tested a model for implementing PPBS in districts of fewer than 25,000 students. The completed model has three components: planning, programming, and budgeting. This document details the four elements of the programming component: (1) program structure, or the framework designed to achieve educational objectives; (2) program criteria, or the measures of effectiveness of stated programs; (3) feedback mechanisms, or the procedures to facilitate information return on costs and attainment of objectives; and (4) multiyear cost, or the techniques to facilitate the forecasting of future educational needs.

22. McGivney, Joseph H., and Nelson, William C. Program, Planning, Budgeting Systems for Educators. Volume II: A Case Problem. Final Report. Leadership Series No. 19. Columbus: Center for Vocational and Technical Education, Ohio State University, 1969. 165 pages. ED 032 418 MF \$0.65 HC \$6.58.

This case problem is designed for use by planning, budgeting, or administrative personnel in state or regional vocational education organizations. The problem involves planning, programming, and budgeting best accomplished in small-group settings. Ideally, each small group should consist of persons with a variety of duties and responsibilities. The faculty of the formal training institute utilizing this material should be familiar with PPBS and the situational context of the participants. The problem is organized in eight sequential steps: (1) analysis of traditional budget, (2) manpower needs, (3) program structure, (4) achievement of objectives, (5) estimation of costs, (6) estimation of benefits, (7) program budget, and (8) evaluation of program budget and PPBS. Estimated time for each step is given. Each small group should have a calculator, an adding machine, a typewriter, a few basic references, and sufficient space to facilitate the work. Some secretarial services are desirable and duplicating facilities are necessary.

23. Montgomery County School Board. Planning-Programming-Budgeting System for School Districts. Version III, Model 1. Intermediate Unit Planning Study. Norristown, Pennsylvania: 1971. 186 pages. ED 055 372 MF \$0.65 HC \$6.58.

This manual was prepared as a model for local school district implementation of a planning, programming, budgeting system. The first section presents basic concepts and overall design of PPBS for local districts. The second section describes computations used in a semiautomated PPBS version, provides guidelines for cost allocations to programs, and describes data files. The third section contains instructions for filling out data cards used in the semiautomated version. Appendixes illustrate the types of input needed for and output received from the computerized version.

24. Nelson, William C. Program, Planning, Budgeting Systems for Educators. Volume IV: A Research Bibliography. Final Report. Columbus: Center for Vocational and Technical Education, Ohio State University, 1970. 117 pages. ED 038 512 MF \$0.65 HC \$6.58.

The PPBS approach to decision-making has been adopted by government agencies and by many colleges, universities, and local school systems. As a result, the quantity of literature is great. This bibliography includes over one thousand citations emphasizing the period 1963-1969. It is intended to assist students, researchers, and practitioners in identifying references within specific areas of PPBS: systems theory, planning and control systems, planning process, program budgeting, programming and management control, investment alternatives, analysis of alternatives, education and economics, basic data for PPBS, statistical analysis in PPBS, limitations of PPBS, and bibliographies. Each of the specific areas is subdivided into educational general categories. Entries are arranged alphabetically and indexed by author.

25. Novick, David. Origin and History of Program Budgeting. Santa Monica, California: The Rand Corporation, 1966. ED 013 494 Document not available from EDRS. (Available from National Technical Information Service, Springfield, Virginia 22151. AD 641 442, MF \$0.95 HC \$6.00.)

This document traces the origin and historical development of program budgeting, currently applied to all executive offices and agencies of the U.S. government. Program budgeting was recognized and applied by industry as early as 1924, by the Wartime Control System in 1942, and by the Department of Defense today. The document is a transcription of a filmed talk for the U.S. Bureau of the Budget and U.S. Civil Service Commission orientation and training courses in PPBS.

26. Ohio State University. Program, Planning, Budgeting Systems for Educators. Volume I: An Instructional Outline. Leadership Series No. 18. Columbus, Ohio: Center for Vocational and Technical Education, 1969. 279 pages. ED 032 417 MF \$0.65 HC \$9.87.

Planning, programming, budgeting systems (PPBS) include concepts and

techniques for resource allocation decision-making for rational and effective programming. Most federal agencies use PPBS for development, analysis, and presentation of resource needs. Traditional budgeting methods focus primarily on resource inputs, but PPBS focuses on both inputs (cost) and outputs (benefits). The guidelines in this volume suggest a course in PPBS with initial training in a sequential pattern. Examples are drawn from the field of vocational education. The document includes background and rationale for PPBS training, an educational training program in PPBS, and a program supplement. The instructional outline includes an overview and sections on systems theory, the planning process, investment alternatives, program budgeting, analysis of alternatives, programming and management control, basic data for PPBS, and limitations of PPBS. The supplement includes pretests and posttests, a conceptual framework, a discussion of the relationship of education and economics, and methods of statistical analysis in PPBS.

27. Perkins, Joseph A., Jr. "PPBS and MIS: Their Role in Managing Education." Paper presented at National School Finance Conference, New Orleans, March 1969. 15 pages. ED 030 961 MF \$0.65 HC \$3.29.

Planning, programming, budgeting systems provide a new approach to the optimum use of limited school resources in improving the learning process. In conjunction with management information systems (MIS), PPBS is a tool school officials can use to communicate to taxpayers the necessity for current school programs and the manner in which tax dollars are allocated. PPBS requires that general educational goals, based on perception of community needs, be translated into specific, quantifiable objectives to be achieved within specified time periods. Programs for carrying out these objectives are then specified and compared for expected effectiveness and cost. Approved long-run and short-run programs are budgeted and put into operation. The various program operations are evaluated according to previously established criteria for fulfillment of the specified objectives. To estimate, evaluate, and report on operating systems within the multiyear PPBS framework, certain MIS data are required. The five major categories of MIS data are pupil, program, personnel, facilities, and financial data. Using these data, the school administration can make decisions regarding programs and budgets.

28. Piele, Philip K. Planning-Programming-Budgeting Systems. Educational Management Review Series Number 2. Eugene, Oregon: ERIC Clearinghouse on Educational Management, University of Oregon, 1972. 8 pages. ED 058 622 MF \$0.65 HC \$3.29.

This review surveys documents previously announced in Research in Education concerning development of PPBS for educational planning, models of PPBS implementation, specific applications for libraries, and available

bibliographies on PPBS. PPBS decision-making models enable school administrators to identify objectives, delineate programs to achieve those objectives, analyze alternatives, allocate resources over time, and calculate cost and program effectiveness.

29. Piele, Philip K., and Bunting, David G. Program Budgeting and the School Administrator: A Review of Dissertations and Annotated Bibliography. Review Series, Number Two. Eugene, Oregon: ERIC Clearinghouse on Educational Administration, University of Oregon, 1969. 50 pages. ED 035 065 MF \$0.65 HC \$3.29.

Research findings from doctoral dissertations on program budgeting are reviewed and applied to educational administration in this paper. The review discusses problems and shortcomings of both traditional and program budgeting techniques and describes both positive and negative reactions of administrators who have had experience with program budgeting. An introductory chapter illustrates basic principles of program budgeting. Other chapters include specific examples of the use of program budgeting to compare, allocate, and plan the costs of educational objectives. An annotated bibliography lists twenty-two relevant dissertations dated 1964-1968.

30. Scamman, James. "PPBS: Focus on Output Performance. One Local District." Paper presented at American Educational Research Association annual meeting, New York, February 1971. 27 pages. ED 047 372 MF \$0.65 HC \$3.29.

A planning, programming, budgeting system developed for a Kenosha, Wisconsin, school district of medium size has two implementation phases: an experimental program-oriented budget for the 1970-1971 school year and a five-year plan to reevaluate and develop a program structure and program goals. Accounting and information processing needs are emphasized. The major implementation difficulty is lack of guidance and assistance on the national and state levels.

31. University of Pennsylvania. General Design for an Education Planning-Programming-Budgeting System. Philadelphia: Government Studies Center, 1968. 168 pages. ED 037 812 MF \$0.65 HC \$6.58.

A study of the reorganization problems involved in the consolidation of county education offices into intermediate units developed management tools for administrators and boards of intermediate units. Specifically, the study includes the design, testing, and initial implementation of a planning, programming, budgeting system. The system will facilitate coordinated effort between local districts and intermediate units in providing educational services. This report presents a preliminary design

of the PPBS tested by project staff, pilot districts, and county offices in 1968.

32. University of Pennsylvania. Education-Planning-Programming-Budgeting System Procedures Manual for Intermediate Units, Version I, Model 2. Volumes I and II. Philadelphia: Government Studies Center, 1969. 462 pages. ED 037 813 MF \$0.65 HC not available from EDRS.

Two distinct types of PPBS have been developed by the Pennsylvania ESEA Title III Intermediate Unit Planning Study: manual and semiautomated. The semiautomated version is described in documents 31 and 33. The manual version, as revised, utilizes manual calculation with a desk calculator. No further development of the manual version is contemplated. This document details manual procedures for intermediate units and includes a suggested work schedule and samples of forms, worksheets, and reports. School districts using the manual version should refer to document 32 in this abstract.

33. University of Pennsylvania. Education-Planning-Programming-Budgeting System Documentation Manual for Intermediate Units, Version II, Model I. Philadelphia: Government Studies Center, 1969. 249 pages. ED 037 814 MF \$0.65 HC not available from EDRS.

Two semiautomated PPBS have been developed by the Pennsylvania ESEA Title III Intermediate Unit Planning Study: the batch-processed version and the on-line version. Both depend on electronic data processing equipment for calculation. This document, used with document 30, enables intermediate units to apply batch-processed PPBS. School districts using batch-processed PPBS should refer to document 33 in this abstract.

34. University of Pennsylvania. Education-Planning-Programming-Budgeting System Procedures Manual for School Districts, Version I, Model 2. Volumes I and II. Philadelphia: Government Studies Center, 1969. 391 pages. ED 037 815 MF \$0.65 HC not available from EDRS.

This document details procedures for local school district use of a manual PPBS developed by the Pennsylvania ESEA Title III Intermediate Unit Planning Study. Procedures for intermediate unit use of the manual version are specified in document 30 in this abstract. The manual PPBS can be calculated on a desk calculator. The authors give background information, list major elements of the manual PPBS version, and suggest specific procedures for implementation. Sample forms, worksheets, and reports are included, as is a recommended work schedule. Appendixes contain school district data and information file requirements, a general method of estimating future school enrollments, a survey of secondary school course offerings in 1968-1969, and a methodology for revenue forecasting in education.

35. University of Pennsylvania. Education-Planning-Programming-Budgeting System Documentation Manual for School Districts, Version II, Model 1. Philadelphia: Government Studies Center, 1969. 213 pages. ED 037 816 MF \$0.65 HC not available from EDRS.

School districts can use this manual with the batch-processed PPBS developed by the Pennsylvania ESEA Title III Intermediate Unit Planning Study. Two semiautomated PPBS versions were designed in Pennsylvania: batch-processed and on-line. Both depend on electronic data processing equipment for calculation. This document on the batch-processed version contains a sample school district printout, a suggested work schedule, and program documentation for the system analysis. The manual for intermediate unit use of batch-processed PPBS is document 31 in this abstract.

36. Waters, James E. "PPBS: A Statewide Approach." Paper presented at American Educational Research Association annual meeting, New York, February 1971. 8 pages. ED 047 388 MF \$0.65 HC \$3.29.

To ensure a more uniform accounting system and better communication with its schools, California introduced a planning, programming, budgeting system in all its public school districts. Schools must identify specific management goals and subdivide functional areas into manageable units. Use of program budgeting assures a better relationship among schools, community members, and state agencies.

37. Western New York School Development Council (Formerly Western New York School Study Council). Development of an Operational Model for the Application of Planning-Programming-Budgeting Systems in Local School Districts. Program Budgeting Note 1, Introduction to Program Budgeting. Buffalo, New York: 1968. 11 pages. ED 028 539 MF \$0.65 HC \$3.29.

Although the public is best served by governmental agencies that have integrated the major functions of planning, managing, and budgeting, it can be argued that the planning function is paramount. A review of the evolution of public agency administration in the United States reveals that until the 1960s the planning function had been largely overshadowed by management control concerns. This lack of coordinated planning resulted in a myriad of incremental agency budgets based on the short-term, parochial interests of individual agencies. The introduction of a planning, programming, budgeting system (PPBS) to the Defense Department in 1961 provided the impetus for the rapid rise of the planning function in federal program administration. PPBS requires administrators to plan specific program objectives, to consider alternative means systematically, and to select those means most compatible with efficient achievement of interagency program goals. Therefore, comprehensive

long-range planning must supplement the traditional management and budgeting functions. Educational decision-makers are expressing increased interest in the application of PPBS to educational management.

38. Western New York School Development Council (Formerly Western New York School Study Council). Development of an Operational Model for the Application of Planning-Programming-Budgeting Systems in Local School Districts. Program Budgeting Note 2, Program Budgeting in the Federal Government. Buffalo, New York: 1969. 16 pages. ED 028 540 MF \$0.65 HC \$3.29.

Many educational administrators are skeptical of school district attempts to use planning, programming, budgeting systems (PPBS). This seems largely the result of two factors: (1) a general lack of understanding of the concrete operational steps involved in the implementation of PPBS, and (2) a feeling that the qualitative nature of educational objectives would inhibit the utility of PPBS in educational administration. A review of federal guidelines on PPBS implementation and an analysis of PPBS staffing requirements should help the administrator understand the process of implementation. Generally positive evaluations of PPBS by administrators of federal agencies using PPBS attest to the utility of PPBS in organizational units faced with the difficulty of measuring qualitative objectives. The experience of these agencies may encourage school districts to experiment with PPBS.

39. Western New York School Development Council (Formerly Western New York School Study Council). [Development of an Operational Model for the Application of Planning-Programming-Budgeting Systems in Local School Districts. Program Budgeting Note 3, Cost-Effectiveness Analysis: What Is It?] Buffalo, New York: 1969. 11 pages. ED 033 447 MF \$0.65 HC \$3.29.

Cost-effectiveness analysis is useful when benefits and costs are not readily converted to a money base. The process of cost-effectiveness analysis has five elements: (1) an objective must be defined in terms of its nature and methods of achievement, (2) clearly definable alternatives must be established, (3) costs must be expressed in a manner that makes sense in terms of the objective, (4) a model must be created to provide the framework for judging the consequences of each alternative, and (5) a criterion must be established to rank alternatives in order of desirability. The process is designed to support judgment and intuition, not replace them.

40. Western New York School Development Council. Development of an Operational Model for the Application of Planning-Programming-Budgeting Systems in Local School Districts. Program Budgeting Note 4. Williamsville, New York: 1969. 17 pages. ED 039 630 MF \$0.65 HC \$3.29.

This document concerns conceptual problems in developing an administrative planning system for local school districts, rather than specific planning procedures. A typology of planning behavior distinguishes three levels of planning and planning behavior. System planning at the political or community level involves the community and the school district and is primarily an explication of the community's long-range goals for education. System planning at the operational level by the entire school system involves a statement of more explicit objectives and the setting of target dates. Subsystem planning uses individual teachers in the preparation of specific objectives and incorporates actual subject area programs and program elements to meet quantitatively stated objectives within a precisely defined time span.

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