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ABSTRACT

Books, journals, and articles on the subject of program budgeting are included in this annotated bibliography of over 70 items. The three main categories covered are: (1) helpful treatises on budgeting from general education, (2) philosophical and practical statements from the library and audiovisual fields, (3) practical tips and suggestions. Sources of sample budgets are included. (DS)

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ED 114

BUDGETING FOR SCHOOL MEDIA CENTERS:  
AN ANNOTATED BIBLIOGRAPHY

David V. Loertscher

December 1975

U.S. DEPARTMENT OF HEALTH,  
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## INTRODUCTION

As a document, the budget of a school district contains a balanced statement of estimated revenues and estimated expenditures. It is a disciplined way of expressing what will be spent over a period of time and may contain simple or elaborate plans and justifications to explain the monetary figures. The budget document should not be an isolated body of figures but a reflection of an educational plan, a philosophic statement of priority spending which will achieve educational goals. Budget-making as an activity should be the process of setting down, or preparing to do so, the aspirations of the educational program in fiscal terms. It may be of surprise to the reader to learn that budget-making in education is a 20th century event. In fact, schools were one of the last of the governmental units to adopt a method of budget formulation. During the 1920's and 1930's, it was only the forward-looking superintendents who brought budget-making practices to local school districts.

For the last 40-50 years, budget preparation has rested with school superintendents, or in larger districts, with assistant superintendents charged with business matters. It is their responsibility to determine the educational programs for the prescribed periods, to estimate the expenditures needed to achieve the goals of those programs, and to estimate the revenues anticipated from local, state, and federal sources. It then becomes the duty of school boards to modify the proposed documents as they see fit and adopt the budgets as official statements of proposed spending.

After budget adoption, certain persons within educational organizations are allowed to encumber and expend funds under the supervision of accountants,

who set up strict procedures to safeguard funds, promote budget control, and provide fiscal information to administrators and the general public.

The national guidelines for school media programs give the responsibility of designing, formulating, justifying, administrating, and evaluating the budget for media programs to the directors of district media programs or the building media specialists in the absence of district directors. Despite these guidelines, however, media specialists may have no part in the budget-making process, or may be responsible for only a certain portion of the activity. Whatever that portion, media specialists rarely will have an influence on the budget-making philosophy and policies set up by school districts. Thus, wherever media specialists are employed, they have the responsibility of complementing the activities of budget-making as designed and mandated by the school boards and the superintendents.

If media specialists are to meet their responsibilities to the superintendents and the school boards, they must understand the budget-making process so they can influence policy for the better when possible and carry out the intentions of the budget documents in a prudent and accountable fashion. Often, media specialists expend thousands and even hundreds of thousands of dollars in public funds, a task which is no small responsibility.

A search of the literature which might assist media specialists in carrying out budgetary responsibilities turns up relatively few materials written by or for media specialists, although a vast body of material geared for administrators and business managers can be found. The lack of information for media specialists probably indicates that too few media specialists have anything to say about budgetary plans and documents. It probably also indicates that those who are the most knowledgeable in our profession have not had the time or the

opportunity to share their expertise with their colleagues.

A second conclusion from a survey of the literature is that education in the past and present has continued to borrow budgeting concepts from other governmental units and businesses. This can be both a wise and an unsound practice, as experience has shown. Some educators, anxious to find improved techniques or to stay in the forefront, embrace borrowed methodologies and in their exuberance often oversell possibilities without knowing how the method will work in an educational environment. Excesses in new techniques often lead to premature failure and rejection of the entire method.

Traditionally, education has used line-item budget techniques. But in the last 10 years, PPBS (Planning, Programming and Budgeting System) and a number of variations of similar programmatic emphases have received a great deal of attention from educators. The acronyms for the newer techniques are legion (PB, PPES, PPBES, ERMS, among others).

The literature on PPBS is characteristic of the impact of many new ideas on education. Initially, articles announce the new technique as a panacea for the budgetary ills of the past. Then come articles by early adopters who praise the method and have great hopes for its further success. Next come philosophic criticisms of the abuses of the new technique. Rarely, however, do we get articles written by those who have experimented with the technique and failed but have drawn upon their experiences to change and improve their methods.

While the program budget is being criticized in the literature by some, others are praising the technique because it is one answer to the accountability movement of the 1960's. When funding for schools is either declining or not keeping pace with inflationary pressures, unjustified line-item budgets requiring increased spending for instructional materials are sure to be prime

targets for economy-minded budget cutters. This is not to say that program budgets will be safe from such cuts, but they do encourage consideration for the consequences of a too-sharp pencil.

This bibliography has not been constructed to promote a single method of budgeting. Both sides of the various techniques are presented whenever possible. But there is a premise in its construction: That media specialists should be informed and involved in the budget-making process. Hopefully, the items listed will be instructive to the beginner and helpful to the experienced practitioner.

## I. HELPFUL TREATISES ON BUDGETING FROM GENERAL EDUCATION

### A. Current Budgeting Philosophy and Practice

A few select titles are listed which present overviews of school finance and the budgeting process from the field of education.

Alioto, Robert F., and Jungherr, J. A. Operational PPBS for Education: A Practical Approach to Effective Decision Making. New York: Harper, 1971.

The authors present a clear example of how to prepare PPBS documents based on their experience in the Pearl River, New York School District. Many charts and samples are included so that the book can be used as a model.

Browder, Lesley H., Jr. An Administrator's Handbook of Educational Accountability. Arlington, Virginia: American Association of School Administrators, 1973, 78 pp. ED 079 831.

A concise treatise which outlines the process for developing an accountability program plan of which budgeting is a part.

Candoli, J. Carl; Hack, Walter G.; Ray, John R.; and Stollar, Dewey H. School Business Administration: A Planning Approach. Boston: Allyn and Bacon, 1973, pp. 167-192.

The authors' chapter on planning and budgeting is an excellent introduction to the various types of budgeting used in education. Included are the mechanical budget, yearly budget, administration-dominated budget, centralized budget, functional budget, continuous budget, participatory budget, decentralized budget, and PPBES. They also define cost-utility, benefit-cost analysis, and cost-effective analysis.

Hartley, Harry J. Educational Planning - Programming - Budgeting: A Systems Approach. Englewood Cliffs, New Jersey: Prentice-Hall, 1968.

This basic and much-quoted treatise draws the line between budget theory and the mechanics of school financial administration on the one hand, and, on the other, a more generalized description of a conceptual planning process that is appropriate for educators.



Johns, Roe L., and Morphet, Edgar L. The Economics and Financing of Education: A Systems Approach. 3rd ed. Englewood Cliffs, New Jersey: Prentice-Hall, 1975.

There are a number of chapters in this basic text which would be of interest to the media specialist, but chapter 15: "Managing Educational Resources" is valuable as an introduction to budgeting. The chapter gives a brief overview of the development of budgeting in this country and outlines the basic procedures in setting up a budget for the school district. Responsibilities for formulation and adoption are given with suggestions for explaining budget increases. A bibliography is appended.

Knezevich, Stephen J. Administration of Public Education. 3rd ed. New York: Harper, 1975.

As a basic overview of school administration, Knezevich includes a chapter on the economics dimensions of school finance and logistical support services. A bibliography is appended.

Neagley, Ross L.; Evans, N. Dean; and Lynn, Clarence A., Jr. The School Administrator and Learning Resources: A Handbook for Effective Action. Englewood Cliffs, New Jersey: Prentice-Hall, 1969. pp. 135-155.

While references to federal programs and costing figures are out of date, this chapter is an excellent overview of media program budgeting concerns and procedures for the school administrator. The authors give guidelines for budget development, suggestions for budget and line justifications, principles of financing educational media programs, and ways to finance the media programs.

Ovsiew, Leon, and Castetter, William B. Budgeting for Better Schools. Englewood Cliffs, New Jersey: Prentice-Hall, 1960.

This older but useful book is one of the most authoritative overviews of traditional budgeting practices in U.S. education. Current authors still quote Ovsiew and Castetter in areas such as the budget-making process, the budget as an instrument for long-term planning and evaluation, and the budget as a control instrument.

Tidwell, Sam B. Financial and Managerial Accounting for Elementary and Secondary School Systems. Chicago: Association of School Business Officials, Research Corporation, 1975.

This recent addition to the management accounting field shows how overall financial management of schools can be effectively simplified and coordinated. It discusses full disclosure in the framework of the strict legal limits of school fund accounting.

B. Handbooks and Manuals (Generally for the School Administrator)

The three publications listed here are essential in proper budget formulation. They give the national and state requirements plus standard definitions of terms. The Indiana publication is only an example and media specialists should obtain a similar publication from their own state.

Association of School Business Officials of the United States and Canada. Research Corporation. Guidelines to Establish a Certificate of Conformance Program for Financial Reporting by School Systems. No. 14. Chicago: Association of School Business Officials of the United States and Canada, 1971.

This publication provides standards for preparing budget documents which are designed to improve financial management of educational resources. School districts may submit their budgets to the Association and receive recognition for following sound principles and guidelines in financial reporting.

Roberts, Charles T., and Lichtenberger, Allan R. Financial Accounting: Classifications and Standard Terminology for Local and State School Systems. State Educational Records and Reports Series: Handbook 2, Revised. Washington, D.C.: U.S. Department of Health, Education, and Welfare, 1973, 197 pp. ED 081 103.

Designed to provide state and local systems with a standard format for developing their financial reports in order to achieve reasonable comparability of data and information.

The present volume provides the accounting procedures for a PPBES budgeting system. The most helpful items include the classification of expenditure table and the numerous definitions which every budget-maker should know. (For those who do not plan to implement a PPBES system, the older edition of this work is still a mainstay: Paul L. Reason and Alpheus L. White, Financial Accounting for Local and State School Systems, Standard Receipt and Expenditure Accounts. Washington, D.C.: U. S. Government Printing Office, 1957, U.S. Department of Health, Education, and Welfare, Office of Education, State Educational Records and Reports Series: Handbook 2, Bulletin 1957, No. 4.)

State of Indiana, State Board of Accounts. Accounting Manual for Indiana Public School Corporations. Rev. ed. Indianapolis: State Printing Office, 1968.

The above citation is given as a sample of an accounting manual which is available in various forms from every state government. The purpose is to provide school districts with ways of fulfilling the requirements of state law in budget preparation and disbursement of funds. Spending categories are listed and defined, budgeting procedures and laws are cited or given in full. Particularly valuable for the beginner and for the experienced person changing states.

C. Comparative Statistical Data on Spending for Education

Media specialists need national and local spending data for education to be able to figure the amounts which the national guidelines recommend be spent on media programs.

National Comparison of School Costs. Westport, Connecticut: Market Data Retrieval Inc. Annual.

Formerly entitled National Schools Comparison Guide, this book presents detailed statistics collected from school districts all over the U.S. Data include expenditures by U.S.O.E. region, by size of district, by state, and notes trends and changes. Within the cost of instruction tables are categories for textbooks, library books, audiovisual materials and teaching supplies. This report and other computerized comparison services are available from the Company at 800 Boston Post Road, Westport, Connecticut.

National Education Association of the United States. Research Division. Rankings of the States. Washington, D.C.: National Education Association. Annual.

Of interest to school media specialists is the comparative ranking for current expenditures per pupil ADA in every state. No breakdown is given for expenditures on media center materials but the national expenditure data is helpful in figuring the recommended funding which Media Programs: District and School recommends.

II. PHILOSOPHICAL AND PRACTICAL STATEMENTS FROM THE  
LIBRARY AND AUDIOVISUAL FIELDS

A. Treatises and National Guidelines Statements

This section begins with the statement of the national guidelines and continues with expositions on budgeting from national leaders presented mostly as chapters in textbooks on the administration of school media centers.

American Association of School Libraries, and Association for Educational Communications and Technology. Media Programs: District and School. Chicago: American Library Association, 1975.

As the official statement of the two national associations concerned with school media centers, the current guidelines provide media specialists with guiding principles in budget components and formulation plus suggested allocations for materials, equipment and supplies. Readers should not limit themselves to the section entitled "Budget" but should check the index for useful budget references throughout the document.

Brown, James W.; Norberg, Kenneth D.; and Srygley, Sara K. Administering Educational Media: Instructional Technology and Library Services. 2nd. ed. New York: McGraw-Hill, 1972.

A coordinated budget plan for all media services is suggested by the authors. They define the levels of budget planning as: (1) continuity budgeting, (2) incremental budgeting, and (3) expansion budgeting. Within this framework, a program approach linked with the recommendations of national standards is suggested as the best means to achieve effectiveness. As with all text treatments, there are some out-of-date facts and concepts but on the whole, this is an excellent treatise. Contains bibliography.

Erickson, Carlton W. H. "Budgeting for Media Service Programs." Administering Instructional Media Programs. New York: MacMillan, 1968, pp. 544-583.

Although Erickson's chapter is somewhat dated, particularly in his discussion of federal programs, this treatise is excellent for providing both narrative explanations and clear examples. The chapter is concerned with budgeting for audiovisual services apart from library services. Sample budgets (principally line-item) are given for both district-level and building-level programs. There are suggestions for estimating costs, administering the budget, and writing proposals for special grants.

Gillespie, John T., and Spirt, Diana L. Creating a School Media Program. New York: Bowker, 1973, pp. 73-99.

The most current of the text-type introductions, this chapter presents an overview of budgeting for the individual school media center. Background information such as collection assessment, community needs, curriculum plans, and district accounting schemes are presented as a prelude to budget construction. The authors then suggest components for cost estimation and outline the common types of budgets used in schools (lump-sum, line-item, object of expenditures, performance, and PPBS). The section on PPBS is the most extensive and includes a sample inservice' program proposal.

Summers, F. William. "A Change in Budgetary Thinking." American Libraries, December 1971, pp. 1174-1180. Also in: Shields, Gerald R., and Burke, John Gordon, eds. Budgeting for Accountability: A Selection of Readings. Metuchen, New Jersey: Scarecrow, 1974, pp. 11-13.

Summers traces the history of budgets and budgetmaking. He reviews the lump-sum budget, the line-item budget, the performance budget, and PPBS. For each, he lists the advantages and the disadvantages for the library community.

## B. Understanding Program Budgeting

The items selected for this section include works which 1) introduce PPBS as a tool for general education, 2) explain how PPBS may be used in media centers, and 3) articles critical of this technique.

Curtis, William H. Educational Resources Management System. Chicago: Association of School Business Officials, Research Corporation, 1971.

Chapter 5, "Budgeting," must be understood within the framework of the author's conception of ERMS, but the chapter does show sample budgets for programs based upon five-year planning. Techniques for budget review, management and reporting use of resources are covered.

Hatch, Lucille, and Forsythe, Ralph A. "Upgrading Performance Through PPBS in School Media Centers." Library Trends, April 1975, pp. 617-630.

Hatch and Forsythe summarize the best articles from the past eight years concerning PPBS and the school media center. An overview is given of the structure of PPBS and extensive quotations are given from articles reviewed. The best one-article review for current literature on the subject. A bibliography is appended.

Kirst, Michael W. "The Rise and Fall of PPBS in California." Phi Delta Kappan, April 1975, pp. 535-538.

As a state, California mandated use of PPBS in 1966 and ended the experiment in 1972. Kirst traces the reasons for the adoption and failure of the system in a complex political environment.

Koerner, Thomas F. PPBS and the School: New System Promotes Efficiency, Accountability. Arlington, Virginia: National School Public Relations Association, 1972.

Prepared for school administrators, this excellent publication is a digest of PPBS - what it is, how it works, how to construct the system, and the advantages and disadvantages of its adoption. Sample budgets are included in the appendix.

Liesener, James W. "The Development of a Planning Process for Media Programs." School Media Quarterly, Summer 1973, pp. 278-287.

Liesener's technique provides a total process for determining media program components, involving users in program decisions, reallocating resources to meet specific user needs, and evaluating progress toward program goals. The use of this process, while complex and time consuming, provides hard costing data for the services of a media center program and can serve as a basis for sound budget formulation and program direction.

Meyers, Judith, and Barber, Raymond. "McNamara, Media, and You." Library Journal, March 15, 1971, pp. 91-93.

Meyers and Barber note that many media specialists are hardly involved in budget making and feel that PPBS is one answer for achieving success in the budgeting process. Their bibliography is out of date now, but their comments and suggestions still have merit.

van Geel, Tyll. "PPBES and District Resource Allocation." Administrator's Notebook, November 1973, pp. 1-4.

Planning, Programming, Budgeting, Evaluation Systems have been advanced as a possible panacea to permit school districts to choose policies that are more efficient and effective rather than having decisions based solely upon political considerations, personal experience, and hunches. Using a concept of PPBES which is compatible with existing budget process, a case study was undertaken in an urban district and a suburban district, both of which had embraced PPBES. After observing one budget cycle, it was concluded that neither district used PPBES methods for deciding how its resources were to be allocated. Budget decisions were the product of nonanalytical thinking such as a fair share concept, input standards determined through negotiations, maintenance of "core" programs, state guidelines, and political considerations. In addition to the absence of five conditions necessary for the execution of PPBES, the decision process was shaped by factors such as political constraints, an assumption that more resources are better for student achievement, input thinking rather than an output focus, and a profound distrust of analytically produced information.

Weiss, Edmond H. "The Fallacy of Appellation in Government Budgeting." Public Administration Review, July/August 1974, pp. 377-379.

The fallacy of appellation is a defect in budget deliberations, in which the name of an account or program is confused with the activities generally associated with that name. The fallacy, which is inherent to program budgeting, is built on two incorrect assumptions: first, that a government cannot engage in an activity unless dollars are "earmarked" for that activity, and second, that having dollars "earmarked" guarantees that they will be used for the purpose identified in the account name. Because pure budgeting-by-objective is neither theoretically possible nor practically desirable, budget makers must be vigilant in detecting fallacies of appellation and exposing them in budget debates.

Whritner, John A., and Antin, Arthur P. "Program Planning -- Using Management-by-Objectives in School Administration." In: Handbook of Successful School Administration. Englewood Cliffs, New Jersey: Prentice-Hall, 1974. pp. 503-555.

Two school superintendents with experience in program planning give a chatty description of decision making within a program framework and support their points with case studies from their own experiences. As an appendix, they provide a decision matrix entitled VALED which can serve as a check on procedures as a person progresses through the planning process.

### C. Cost-Analysis of Instructional Technology

The media specialist has the responsibility to select from among the various technologies those which will best fulfill the goals of the educational program. The items listed here have as their purpose the use of more objective criteria for the selection of a particular technology. Articles which both present methodologies and which ask basic questions about the processes have been included.

Caffarella, Edward P., Jr. "How Little Do We Know About the Cost-Effectiveness of Instructional Technology?" Educational Technology, January 1975, pp. 56-58.

Caffarella reminds us that even though the literature is full of comments about and claims for the ost-benefits of media, little basic research has been done to substantiate these claims. He suggests that we develop a technique of measuring both costs and benefits simultaneously.

Cober, John G. "Cost of Teaching Different Subjects." 1973, 48 pp. ED 083 703.

Cober analyzes the cost of science, math, and English programs for three school districts in Pennsylvania. Salaries for librarians, library books, and AV materials are included in the breakdown of each program area. A good illustration of program costing is given when the media program is merged into instructional areas rather than treated as a separate program.

Copeland, Jack, and Higgins, K. Ronald. "A Cost-Benefit, Linear Programming Approach to New Project Selection." Educational Technology, September 1974, pp. 41-43.

The Dallas Independent School District has used SHOT, a computerized decision making tool, to select which of many proposed projects will maximize student performance within budget or policy constraints. SHOT (Selection Hierarchy Optimization Tool) allocates only "discretionary money," which means funds above the basic operating expenses which are spent via annual project proposals.

Education Turnkey Systems. "Economics of Third Grade Education." Audiovisual Instruction, November 1971, pp. 8-18.

The COST-ED model is used to compute detailed costing for a typical third grade class. Costs for instructional media are compared to other instructional expenditures for the purpose of forecasting the benefits that might be accrued if the instructional materials cost per student were raised significantly. Valuable as a method for supporting judgments related to program improvements and budget justifications.

Forbes, Roy H. "Cost-Effectiveness Analysis: Primer and Guidelines." Educational Technology, March 1974, pp. 21-27.

Forbes provides definitions of cost-effectiveness and lists the components of the technique. His essential elements of an analysis include program descriptions, student characteristics, effectiveness measures, and costs.

General Learning Corporation, Educational Services Division. Cost Study of Educational Media Systems and Their Equipment Components. 3v. ED 024 273 (78 pp.), ED 024 286 (334 pp.), and ED 024 281 (114 pp.), 1968.

The three volumes in this series are: Guidelines for Determining Costs of Media Systems, Technical Report, and Computer Assisted Instruction.

The purpose of these publications is to provide the educator with a set of guidelines for realistically estimating the total cost of media systems through the use of the COST-ED model. In addition, the documents provide a summary of cost comparisons of various media systems and a summary of cost-saving considerations.

Korman, Frank. "Costing AV Materials: A Job Approach." Audiovisual Instruction, April 1974, pp. 15-18.

This article describes a practical method for identifying and assigning costs of products and services in a media center. Allocation of direct and indirect costs is discussed, and a rationale -- indirect cost per direct labor hour -- is presented.

Kountz, John. "Library Cost Analysis: A Recipe." Library Journal, February 1, 1972, pp. 459-464.

While slanted toward the public library, school media specialists will find Kountz an entertaining simplified introduction to cost accounting. His steps include: identifying a process, reducing the process into component steps, determining resources needed for each component, figuring total costs, considering alternatives, and reviewing the total effort. An excellent annotated bibliography is appended for those who wish to dig further.



Pearson, Robert H. "An Instructional Management Guide to Cost Effective Decision Making." 1973, 69 pp. ED 083 711.

Pearson identifies various methods of cost-effectiveness analysis for educators and gives suggestions on the choice of a system. A good review of the use of systems analysis in education with an appended bibliography.

Ross, Robert F. "How to Compare Your Educational Costs and Benefits." Educational Technology, September 1974, pp. 50-52.

To gain more results from educational resources, Ross advocates the comparison of costs and benefits. His basic steps for the comparison are: 1) Identify benefits (i.e., identify goals and objectives, identify indicators of the extent to which the objectives have been achieved, identify a measurable feature of the indicator that will permit data to be gathered and analyzed, and establish procedures for obtaining data in a reliable and valid manner). 2) Identify costs (i.e., the types of costs that result from the activities analyzed and procedures for obtaining and analyzing data in a reliable manner). 3) Compare the costs and benefits (i.e., equalize costs and compare differences in benefits; equalize benefits and compare costs).

Speagle, Richard E. "The Costs of Instructional Technology." 1970, 36 pp. ED 039 727.

As a support paper to Sidney G. Tickton's To Improve Learning, Speagle presents an annual table for instructional television, computer access, and CAI. He identifies eight key variables used in computing the various cost configurations and ways these may be used to reduce the costs of instructional technology.

Tickton, Sidney G., ed. "Instructional Technology: Economic Evaluations." In: To Improve Learning: An Evaluation of Instructional Technology: Vol. 2. New York: Bowker, 1971, pp. 955-1087.

The eight papers which comprise part six of the Tickton volumes deal with the problems of judging cost effectiveness for audiovisual media. Sound budgeting practice is presented within the larger framework of judging which media system can deliver the most educational benefits for the dollar. While several of the articles deal with problems in a university setting, this type of analysis is extremely helpful for school media specialists at the district and building level.

U.S. National Center for Education Statistics. Educational Technology - Classifications and Standard Terminology, Handbook 10. Washington, D.C.: U.S. Department of Health, Education, and Welfare, forthcoming.

An advance description of this document indicates that its purpose will be to assist in planning and decision making and to establish, improve and insure compatible recording and reporting of educational technology data.

D. "How To Do It" Articles From Practitioners

This section includes biographical descriptions or surveys of the actual use of the newer budgeting techniques. Also included are articles which describe methods used to present the budget to administrators or to the general public.

Alioto, Robert F., and Jungherr, J. A. "Using PPBS to Overcome Taxpayers' Resistance." Phi Delta Kappan, November 1969, pp. 138-141.

The budget of the Pearl River School District in New York was barely accepted by a hostile and suspicious public at its third presentation in 1968. In an attempt to prevent a recurrence, the board and administration successfully employed PPBS the following year. This necessitated greater community involvement, better explanation of the services provided and more relevant information. Details of committee structure, community involvement, and program structure are given.

Association of School Business Officials, Research Committee on Educational Resources Management. Planning Programming Budgeting Evaluation Systems Show and Tell: A Handbook on Implementation of PPBES/ERMS in Education. Chicago: ASBO Research Corporation, 1974.

Information collected from eight school districts who have used PPBES or ERMS is presented for each district under the following headings: 1) a brief statistical profile of the school system, 2) a description of the ERMS/PPBES implementation strategy utilized by the system, 3) a report on the resources required to implement ERMS/PPBES, 4) a description of the conceptual model the system was following; and 5) a statement of the problems encountered in planning and implementing ERMS/PPBES. In addition, each system has appended a list of recommended reference materials and gives samples of documents and publications used in its district.

Ayars, Albert L. "How Norfolk Public Schools Use Cost of Education Index to Win Budget Increase." School Management, October 1974, p. 20.

Here is a superintendent who uses comparative national, regional, and surrounding district budget figures in the justification of local budget documents.

Boardman, Thomas H. "Budget Preparation and Presentation." Audiovisual Instruction, March 1967, pp. 238-241.

Here is an article from an audiovisual director with extensive experience in budget preparation for the audiovisual program in a school district. Boardman recommends a "justified budget" where each item within the line-item budget is documented by need statements and anticipated use. Practical suggestions for these justification statements are given for 16 mm films, filmstrips, equipping a building, and various aspects of equipment purchase and maintenance. He also gives suggestions for budget acceptance through groundwork sessions with the superintendent and individual board members.

Burton, Robert E. "Formula Budgeting: An Example." Special Libraries, February 1975, pp. 61-67.

In the past several years, academic and special libraries have shown some interest in formula budgets which project funding needs based on sophistication levels of users, inflation/deflation factors, increases/decreases in user population and other workload factors.

Gottardi, Leslie. "A Survey of Instructional Media Budgets." Audiovisual Instruction, December 1971, pp. 66-69.

Gottardi surveyed 126 school districts in 1971 concerning their budget allocations for audiovisual materials for the years 1968-1970. Tables show per pupil expenditures, federal aid allocations, and the type of budgeting techniques used by the districts to determine the size of various program budgets.

Kent, Arthur E. "How Skokie Created a Program Budget." Nation's Schools, November 1968, pp. 56-59+.

The business manager of the Skokie district reviews their adoption of PPBS for the year 1968. The library (including the audiovisual program) was one of 48 program codes and was 8th in rank for 3.08% of the total budget.

Watro, John P. "Visualizing the School Budget." Audiovisual Instruction, November 1971, pp. 20-22.

Watro describes the production and the successful results of a 27-minute slide/tape program for the purpose of explaining to the voters of Ewing Township, Trenton, New Jersey, the school budget for 1971-72.

### III. PRACTICAL TIPS AND SUGGESTIONS

#### A. Sources for Determining the Current Costs of Instructional Media

A few of the most useful indexes which provide current pricing information are listed for print and audiovisual materials, followed by a current source for equipment prices.

##### PRINT MATERIALS

- Books in Print: An Author-Title Index to the Publishers' Trade List Annual. New York: Bowker, annual.
- Children's Books in Print. New York: Bowker, annual.
- El-Hi Textbooks in Print. New York: Bowker, annual.
- Paperback Books in Print. New York: Bowker, annual.
- Programmed Learning and Individually Paced Instruction. 5th ed. Bay City, Michigan: Hendershot Programmed Learning, 1973.
- Publisher's Trade List Annual. New York: Bowker, annual.
- Subject Guide to Books in Print. New York: Bowker, annual.
- Subject Guide to Children's Books in Print. New York: Bowker, annual.

##### AUDIOVISUAL MATERIALS

- Guide to Microforms in Print. Washington, D.C.: NCR Microcard Editions, annual.
- NICEM Indexes. Los Angeles: National Information Center for Educational Media, dates vary.
- Schwann Record and Tape Guide. Boston: W. Schwann, monthly.
- U.S. Government Films: A Catalog of Audiovisual Materials for Rent and Sale by the National Audiovisual Center. Washington, D.C.: National Audiovisual Center, 1974.

##### EQUIPMENT

National Audio-Visual Association. The Audio-Visual Equipment Directory. Fairfax, Virginia: The National Audio-Visual Association, Annual.

This illustrates and gives specifications for a wide variety of audiovisual equipment. Each manufacturer is responsible for the information given including the suggested retail prices. It includes an index of manufacturers and audiovisual dealers.

B. Comparative Spending Data for Instructional Media

The media specialist must be knowledgeable about current market sales and trends in order to adjust budget figures to the rising costs for instructional media. The Publishers Weekly statistics are easily obtainable for trends in book publishing, but statistics for the audiovisual industry are much more expensive to obtain and do not use standard terminology from tool to tool.

Brown, James W. Educational Media Yearbook. New York: Bowker, annual.

A welcome addition to the audiovisual field, Brown's yearbook which began publication in 1973 is similar to the Bowker's Annual of Library and Book Trade Information. To date, the Yearbook has contained a section on the audiovisual industry which forecasts sales and business outlooks. Contributions from the Hope Reports, World Education Markets, Education Media Producers Council, etc. give market statistics valuable to budget makers who must keep abreast of trends and costs of audiovisual media.

"The Cost of Education Index." School Management, January 1974, pp. 18-37.

Until it ceased publication in 1974, the School Management annual index had been a convenient source of comparative spending data for various school expenditures. This issue is still valuable since it gives a breakdown of library and audiovisual allocations for 1972-1974 on a nationwide basis. Average cost per pupil (ADA), % of net current expenditures, average expenditures in nine geographical regions and average expenditures in seven size groups are given. For charts giving trends from 1966-1971 of expenditures for audiovisual equipment and materials, see: Guide to Educational Technology, by Edna and Charles Frankle.

Frankle, Edna, and Frankle, Charles. Guide to Educational Technology. Westport: Connecticut: Technomic Publishing Co., 1971.

For the budget-maker preparing charts of marketing trends over a period of years, the Frankles' book may be of some value. There is a section of charts which cover the years 1970-1971 on topics such as: estimated inventory of audiovisual equipment 1970-1971; total per-pupil expenditures for audiovisual equipment, materials, supplies, and services 1962-1971, etc.

Updated figures can be obtained from other publications listed in this section of the bibliography.

Grannis, Chandler B. "AAP Annual Statistics." Publishers Weekly, July 22, 1974, pp. 42-44. Also in: The Bowker Annual of Library and Book Trade Information. New York: Bowker, annual.

Each year statistics of interest to media specialists are taken from the American Association of Publisher's "Industry Statistics." Comparative tables for a span of years in book publishing are given and trends are noted. Useful tables include book output in various categories (adult, children's, texts, etc.), sales figures by category, and average book prices by category.

Hope, Thomas W. Hope Reports. Rochester, New York. 1969-

The Hope Reports began publication in 1969 and consist of an annual volume entitled AV-USA, and a yearly companion report, e.g., Education and Media 1973-1974. These volumes are supplemented by the Hope Reports Quarterly and a new bi-monthly newsletter. Of help to budget-makers are the numerous charts, tables, and graphs showing past and present market statistics and trends for segments of the audiovisual industry. Data for the reports are gathered by Thomas W. Hope through numerous surveys of educational institutions and industrial corporations. Government-gathered statistics are also presented.

The Hope publications are proprietary and therefore expensive. They may be obtained by writing Hope Reports, Inc., 919 S. Winton Road, Rochester, New York 14618.

#### C. Sample Budgets and Tips on Construction

There are a number of articles written, for the most part, by practitioners which give excellent advice for the beginner and the experienced media specialist on budget planning, construction, and execution. The best of the current literature has been selected for inclusion, plus articles which are out-of-date in some respects but which are still valuable for the concepts and suggestions they propose.

American Institute of Certified Public Accountants. "Managing Public School Dollars." 1972, 31 pp. ED 083 708.

Designed as a guide for school boards, this brief publication presents a capsule summary of school finance and budgeting. For the budget-maker, it lists the types of concerns which the public is likely to have when analyzing budget methods and documents.

Bowman, Cora Paul; Heidbreder, M. Ann; and Nemeyer, Carol A. Guide to the Development of Educational Media Selection Centers. Chicago: American Library Association, 1973.

Chapter 8 of this publication entitled "Budgeting" gives some recommendations on budget components for selection centers (places where new commercial materials may be previewed for possible purchase). These recommendations are the result of a national survey of educational media selection centers done by ALA and may be considered as the best professional judgment of a number of experts in the school media center field.

Cole, Georgia R. "Budgeting for Centralized Cataloging and Processing." Hoosier School Libraries, March 1972, pp. 26-29.

For those contemplating the organization of a centralized processing center, Cole's practical suggestions are very helpful. She illustrates how to figure unit costs for a budget proposal and how to compare these figures with in-school processing or commercial preparation. Because of inflation, Cole's figures are not current, but it is easy to follow her outline for a current and realistic budget proposal.

Hanna, Lyle. Preparing Proposals for Government Funding. Englewood Cliffs, New Jersey: Prentice-Hall, 1969.

Because media center budgets are often supplemented by special grants from local, state and national governments, media specialists must be adept at writing proposals for programatic projects or supplemental funding. This publication, one of many, provides suggestions for writing these proposals. The section on budget preparation gives suggestions for figuring direct and indirect costs, keeping budget records and gives a sample budget for an eleven-day institute.

Hannigan, Jane. "PPBS and School Media Programs." American Libraries, December 1972, pp. 1182-1184. Also in: Shields, Gerald R., and Burke, Gordon, eds. Budgeting for Accountability in Libraries: A Selection of Readings. Metuchen, New Jersey: Scarecrow, 1974, pp. 71-80.

A set of thirteen programmatic units are suggested by Hannigan for use in PPBS formulation. Each unit is a program statement, e.g. "The program requires flexible accessibility to materials and equipment", followed by a translation of the statement into action functions, i.e., circulation of equipment to homes, extension of hours, materials security, etc. An excellent article for those who need ideas to get started.

Howard, Lore. "A Better Look at Budgets." Library Journal, March 15, 1971, pp. 1081-1082.

Howard's concerns are with the adoption of the 1969 Standards and Title II, but her suggestions for budget formulation are still valid.

Melcher, Daniel, and Saul, Margaret. Melcher on Acquisition. Chicago: American Library Association, 1971.

Budgeters are much better prepared when they know the practicalities

involved in the expenditures of funds. The Melcher book, even though slanted toward the public librarian, provides many helpful and practical money saving hints (plus a few caveats) for the buyer.

Miller, Ellen Wasby. "Sensible Steps Toward Library Automation." School Library Journal, February 15, 1972, pp. 37-39.

For those considering the mechanization of library processes via computer, Miller gives some sensible advice for estimation of costs, among other considerations.

Morris, Barry. "The Dollars and Sense of the Standards." School Library Journal, April 1970, pp. 50-51.

While concerned with the 1969 Standards for School Media Programs, Morris gives some valuable guidelines for figuring program costs based on criteria published in standards documents. Warnings are given about the misuse of standards to detract from the real emphasis which must be made on curriculum and program.

Nickel, Mildred L. Steps to Service. Chicago: American Library Association, 1975, pp. 8-16.

In her short section on budgeting, Nickel gives practical advice for the preparation of program budgets and line budgets. She includes a sample line budget which includes item justification and a sample budget account record.

Polette, Nancy. The Vodka in the Punch and Other Notes from a Library Supervisor. Hamden, Connecticut: Linnet Books, 1975, pp. 66-96.

Chapter 4 entitled "Uncle Sam Hates Library Supervisors: Bids, Budgets, and Bureaucracy" is a delightfully light and helpful expose on the real world of dealing with budgets and getting the money spent. The best part of the chapter is a five-year program improvement plan which is a good example of long-range budgeting that develops from programs rather than comparative expenditures of previous years.

Robinson, Margaret M. The School Library Budget: A Handbook for Beginning Librarians. Ypsilanti, Michigan: The Author, 1964.

For traditional line-item and lump-sum budgeting, Robinson's manual is a very brief but practical outline of how to make out a budget and what type of records need to be kept of expenditures. Simplified accounting systems are shown. The publication is available from the author at: Section of Library Science, Dept. of Education, Eastern Michigan University, Ypsilanti, Michigan 48197.



Thomas, J. Alan. "Educational Planning in School Districts." Administrators' Notebook, July 1974, pp. 1-4.

Thomas reviews both the problems and the promises of PPBES and MBO in the educational system. He notes the political concerns of pressure groups on budgeting no matter what planning system is operational, and suggests that success in planning will depend on a better measure of educational quality, better cooperation between members of the educational community, and a concerted effort to increase productivity in the classroom.

Wedgeworth, Robert. "Budgeting for School Media Centers," School Libraries, Spring 1971, pp. 29-36. Also in: Ward, Pearl L., and Beacon, Robert. The School Media Center: A Book of Readings. Metuchen, New Jersey: Scarecrow, 1973.

Wedgeworth gives a compact overview of the problems confronting school media specialists who lack control over budgetary matters. He condemns those who lack understanding and suggests ways in which the budget should reflect program so as to be an effective communication device to administrators. A bibliography is appended.