Application of Zero-Base Budgeting in the Learning Resource Center

Javad Raiesdana

Eastern Illinois University
APPLICATION OF ZERO-BASE BUDGETING
IN THE LEARNING RESOURCE CENTER

BY

JAVAD RAIESDANA

FIELD EXPERIENCE
SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE
SPECIALIST IN EDUCATION

IN THE GRADUATE SCHOOL, EASTERN ILLINOIS UNIVERSITY
CHARLESTON, ILLINOIS

1990

I HEREBY RECOMMEND THIS FIELD EXPERIENCE BE ACCEPTED
AS FULFILLING THIS PART OF THE GRADUATE DEGREE CITED ABOVE
ABSTRACT

Budgeting is a statement of the organizational goals and objectives in monetary terms. Traditionally, budgets have been developed by adding to the previous year's budget as a base (at least in theory), but rather to start from a zero base and requires a justification of all expenditures. This method of budgeting assumes that each year's budget requests are built up from zero in response to the priorities and needs of that year.

The range of opinion about zero-base budgeting is broad. Some critics regard it to be of great value while others feel that it is inadequate. The purpose of this study was to investigate the application of zero-base budgeting in the learning resource center.

Zero-base budgeting does not appear to be a budgeting system that can be used by learning resource centers. While the learning resource center's service is difficult to measure in economic terms, how can we implement zero-base budgeting which calls for annual review of all programs from a ground zero. For learning resource centers, the goal is not making money, but rather giving services. The termination of programs is
not always possible in learning resource centers because of external regulations and pressures. Furthermore, zero-base budgeting requires a great deal of staff time and paper work.

In any budgetary process, one of the end-products of a learning resource center's budget will be an allocation of a great part of the budget to personnel related expenditures, in most cases up to 60 percent of the budget. The present distribution of personnel budget will play a major role in determining the future. This is so mostly for non-budgetary reasons. Federal or state regulations and human relationships are equally as meaningful as budget figures on paper. The amount allocated to subscriptions and binding represents 14 percent of the operating expenditures. This amount is a permanent commitment to the learning resource center and the administrators cannot make any significant change in this part of the budget. Furthermore, in practice, zero-base budgeting does not start at zero, but some fraction of last year's expenditures. The fraction can be set at 50 percent or somewhat higher or lower depending on the situation.

Administrators of learning resource centers have very few choices to modify or eliminate programs. As long as 75 percent of the budget (personnel related
expenditures, subscriptions and binding) represent a permanent commitment to the learning resource center and the 25 percent remaining practically does not start at zero, there is no room for justification of an entire budget request. The most cogent criticism of zero-base budgeting is that it requires a great deal of effort and results in very little or no change in the learning resource centers.
ACKNOWLEDGEMENTS

I would like to express my sincere appreciation and gratitude to the individuals who assisted in the development and completion of this study. My sincere appreciation is extended to my advisor, Professor Robert Wiseman, for his patience, perceptive guidance and continuous support during my graduate studies at Eastern Illinois University. To Dr. Larry William, Dean of Graduate School and Research, appreciation is extended for his understanding and flexibility. Finally, my parents, who made many sacrifices that I might continue my education, goes the most personal thank you. I especially received encouragement and unaltering support and hope for the future from my son, Azad.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Introduction ........................................ 4</td>
</tr>
<tr>
<td>I-1</td>
<td>Background Information ............................ 4</td>
</tr>
<tr>
<td>I-2</td>
<td>Review of Related Literature ..................... 7</td>
</tr>
<tr>
<td>I-3</td>
<td>Significance of the Study ......................... 10</td>
</tr>
<tr>
<td>I-4</td>
<td>Statement of the Problem .......................... 11</td>
</tr>
<tr>
<td>I-5</td>
<td>Definition of the Terms ............................ 12</td>
</tr>
<tr>
<td>II</td>
<td>Budgeting Techniques ................................ 14</td>
</tr>
<tr>
<td>II-1</td>
<td>Budgeting: Defined and Identified ................ 14</td>
</tr>
<tr>
<td>II-2</td>
<td>Comparative Budgeting System ..................... 17</td>
</tr>
<tr>
<td>III</td>
<td>Application of Zero-Base Budgeting ............... 24</td>
</tr>
<tr>
<td>III-1</td>
<td>Zero-Base Budgeting: Defined and Identified ........ 24</td>
</tr>
<tr>
<td>III-2</td>
<td>Failure of Zero-Base Budgeting .................... 28</td>
</tr>
<tr>
<td>III-3</td>
<td>Zero-Base Budgeting in the Learning Resource Cente .... 31</td>
</tr>
<tr>
<td></td>
<td>Conclusion ........................................... 37</td>
</tr>
<tr>
<td></td>
<td>References ........................................... 40</td>
</tr>
</tbody>
</table>
CHAPTER 1
INTRODUCTION

I-1. Background Information

The thought of preparing the annual budget is looked upon with dread by many library-media specialists. It is considered one of the unpleasant, yet necessary requirements of the trade. Many believe they became library-media specialists to serve the information needs of their patrons, not to practice accounting. Besides, the process has its own vocabulary and includes several other components which tends to increase the fear element involved. It should also be noted that many did not have the training to know how to properly prepare such a document. However, in the past decade there has been an increased realization of the value of the budgetary process, both to the profession and to the services rendered. This increased realization developed from two observations that:

1. The entire process could result in a budget very beneficial or strong detrimental as dependent upon the library-media specialists' abilities.
2. There were several systems available which could better assist in the accomplishment of the facilities, goals and objectives.

Technically speaking a budget is a financial statement of estimated revenues and expenditures for a specific fiscal period. It outlines and specifies the allocation of financial resources to various programs, operating units, and other needs within their organization. The budget is seldom a single document, but is actually a set of related materials supportive of each other. These packets will vary greatly from one organization to another, but they all act as an integral part of the planning process and should be supportive of various funding requests. The budget also serves other purposes which can be of assistance to the managerial arena. Dean Tudor (Tudor, 1972) has prepared a list of some such additional aspects:

1. Budgets bring about regular, periodic reconsideration and re-evaluations of the organization's goals and objectives.

2. The budgetary process facilitates a comparative evaluation of different goals and programs in relation to each other and with respect to their relative costs.

3. The budgetary process provides a periodic link
between working units.

Traditionally, budgets have been developed by adding to the previous year's budget. Some expenditures which were fully justified in the past may have increased in dollars over the years while the need for them may have been diminished or disappeared. In zero-base budgeting administrators do not use the previous year's budget as a base (at least in theory), but rather to start from a zero base and requires a justification of all expenditures. Zero-base budgeting (ZZB) is a planning and budgeting process which requires complete review and justification of an entire budget request. Each segment, sector, project, or program of the organization begins from point "zero" at the start of each fiscal period. The system requires an organization to plan in advance, set goals and make decisions. The decisions are based on alternative programs as viewed from multiple operating levels. Zero-base budgeting is a product of the times.

As the 1930s and the descent of efficiency experts on Washington demanded performance budgeting, as planning programming budgeting system (PPBS) was tied to the programs of the Great Society, and as management-by-objectives (MBO) traded on the desires of the managers who inherited these
programs, so accountability, responsiveness in government, and open in decision making, perhaps demand zero-base budgeting. (Draper, 1978, p. 140)

In reality, zero-base budgeting adopts specific aspects of many of its predecessors. One can see the similarities with zero-based budgeting and performance budgeting and planning-programming-budgeting system budgets. Zero-base budgeting also adopts elements of marginal utility economics, welfare economics, and cost benefit analysis in its techniques. (Draper, 1978)

Chen, author of Zero-base Budgeting in Library Management, states "Zero-base budgeting should not be considered a fixed procedure to be applied uniformly to all organizations. Instead, it is a general and flexible approach which can be adopted to all types of organizations with substantially dissimilar problems, needs, operations, and service programs." (Chen, 1980, p. 16)

I-2. Review of Related Literature

In the November-December 1970 issue of Harvard Business Review, Peter Pyhrr wrote an article (Zero Base Budgeting) as adopted by Texas Instrument, Inc. (Pyhrr, 1970). He was later engaged by the Governor of Georgia, Jimmy Carter, to establish zero base budgeting in the state. An instructional manual was released by
the Governor on March 15, 1971 as a guide for
developing the 1973 fiscal year budget, using the zero-
base budgeting concept. (Green, 1971) Six years before
the article on Texas Instruments' success with zero-
base budgeting, the United States Department of
Agriculture announced that a new concept had been
adopted for the 1964 agency estimates. (Johson, 1971)
President Carter on the 14th of February, 1977 issued a
memorandum for the heads of Executives Departments and
Agencies in which he requested them to implement zero-
base budgeting in their divisions. (Bliss, 1978)

Although zero-base budgeting was given
considerable attention in the management literature
during 1970s, it has been discussed in library related
literature since late 1970s. Library Budgeting:
Critical Challenges for the Future, (Lee,'77) includes
a section on zero-base budgeting. Harvey's Zero-Base
Budgeting in Colleges and Universities (Harvey, 1977)
explains the need for bringing the zero-base budgeting
concept to educational managers who are interested in
the possible application of zero-base budgeting in
their colleges and universities. Martin's Budgeting
Control in Academic Libraries (Martin, 1978) makes only
passing reference to the subject. Charles Sargent, in
the January 1978 issue of Bulletin of the Medical
Library Association, provides a very basic description of zero-base budgeting and its hypothetical application in library, but he does not discuss the possible organizational consequences for a library that might adopt zero-base budgeting. Sargent, '78) An effort at implementing the terminology of zero-base budgeting at the Lockwood Library of the State University of New York at Buffalo was reported by Parker and Carpenter. (Carpenter, 1978) In his book, Budgeting Techniques for Libraries and Information Centers, Michael Koenig focuses on how to use budgeting techniques, including a brief statement on zero-base budgeting, in creating and justifying a budget. (Koenig) However, it was not until 1980 that the library literature included a book on zero-base budgeting. Ching-Chin Chen's Zero-Base Budgeting in Library Management is the most comprehensive book for implementation of zero-base budgeting in libraries. (Chen, 1980) It is the author's intent to provide an objective introduction to the zero-base process. Chen discusses the problems and benefits of the system and the key factors in a successful zero-base budgeting system. Part II of the book provides seven actual zero-base budgeting preparations from diversified types of libraries. Ann Prentice in her book, Financial Planning for Libraries,
presents information on how to prepare and implement a budget for libraries, including zero-base budgeting. (Prentice, 1980)

I-3. Significance of the Study

In learning resource centers, the budget is one of the primary means of managerial control. Management tends to become comfortable with the established budgetary system and the outlook toward operations encouraged by that system. The management of the learning resource center must have an effective system for the allocation of resources to justifiable activities, a system that provides for the introduction of innovative ideas and a system that is sensitive to the economic issues connected with the program of the learning resource center.

The budgeting process is perhaps the central determination in shaping the college learning resource center. Budget is more than simply a list of where the money is spent. It is the resource center's central planning document. Zero-base budgeting may provide such a tool in order to ensure that the activities of the learning resource center are directed toward the proper goals and objectives. But zero-base budgeting is not a panacea. Like any other budgeting system it has its advantages and disadvantages and its potential
value for a given learning resource center is dependent on a number of factors.

I-4. Statement of the Problem

The financial support which had been freely granted to higher education in the 1960s and early 1970s began to decline, and from about 1972 most libraries have found that the purchasing power of their budget has diminished considerably. (Stirling, 1980) Institutions faced high inflation and experienced extremely poor endowment investment results during the decade ended. Since the library materials expenditures are much easier to cut than people, many libraries have fallen way behind in their collection development. Can zero-base budgeting, which was given considerable attention in the management literature during the last decade, be helpful to library administrators in the budget-tight 1980s. The range of opinion about zero-base budgeting is broad. Some critics regard it to be of great value while others like Robert N. Anthony feels that a zero-base budgeting is simply a "propaganda." (Anthony, 1975)

The purpose of this study was to investigate application of zero-base budgeting in the learning resource center. I carefully reviewed and analyzed works in this subject (zero-base budgeting in library
management and the procedure involved in setting up this type of budget). On the basis of this analytical methodology, I examined the merit of application of zero-base budgeting in the college learning resource center. However, since the reader may not have the necessary background in budgeting, contained in this paper is a brief explanation of the impact of a budget and a review of the different budgeting techniques, including zero-base budgeting. The application of zero-base budgeting in the learning resource center is discussed in Chapter III. It is important to note that the implementation of zero-base budgeting is not the subject of this research.

I-5. Definition of the Terms


A learning resource is defined as a single administrative unit that includes both the library and audiovisual programs on a college campus. This unit may include any or all other following: graphics, photography, curriculum center, dial access, radio station, computer center, closed circuit television, and instructional technology.
Development of the learning resources center concept is an administrative combination of services and resources that have been part of the educational environment.

The terms library and learning resource center are used interchangeably in this research. The terms librarian and library-media specialist are also used interchangeably.

Zero-base budgeting is a budget planning process based on the assumption that each expenditure must be justified. Each year, the process starts with a "zero base," meaning that no past activities or expenditures are taken for granted. Each activity program or operating unit must justify its existence as well as its requests for funds. (Harvey, 1972, p. 11)
The purpose of this chapter is to identify and define budgeting and enumerate several of the important components of the budgeting process. A number of various approaches will be reviewed briefly along with the relative benefits and disadvantages of each. This review has been limited to the most prominent approaches. No attempt will be made to cover the endless string of variations and subsystems. Such coverage would require a lengthy report to cover the subjects adequately. The systems which are covered are those most likely to be used by libraries or those which have shown promise in being readily adaptable to the needs of the library-media organization.

II-2. Budgeting: Defined and Identified

Before reviewing and comparing the types of budgetary processes, it is necessary first to understand precisely what a budget is and what its components are. There is a prevailing belief that a budget is merely a statement of revenue inputs and outputs. This misconception must be corrected. In its broadest sense the budget is a statement of the organizational goals and objectives in monetary terms.
It is a simple, yet revealing statement of the organization in terms of its operating procedures and plans for the current and future fiscal periods. "The more well planned and justified a budget program is, the better the chances for obtaining adequate funding." (Hicks, 1977, p. 108) Michael Koenig in his book, Budgeting Techniques for Libraries and Information Centers, states: "The budget and its supporting documentation will be the mechanism by which you will convince your administration or management that your plans are sound and by which you receive the authorization to proceed on those plans..." (Koenig, 1980, p. 1) Anne Prentice has numerated several important aspects of budget which are applicable to all organizations: (Prentice, 1977, p. 92)

1. The budget is a primary planning document. It is a source statement of financial needs and is utilized as a primary indicator of operational planning procedures.

2. The budget is a legal document. Such materials are often required by law and can become elemental aspects of certain legal proceedings.

3. The budget is a political document. First it may be used to obtain certain requirements. Second, it may be used by those wishing to deny
4. The budget should be responsive to both the internal and external environments.

There are other important aspects to consider in relation to the learning resource center budget. First, learning resource center budgets normally fall within the confines of a larger organization. Thus, they ought to reflect the mission and goals of that organization as well. Second, budget policies are greatly reflective of the prevailing management style of both the learning resource center and its parent institution. These aspects should not be looked upon as limitations, but as guides to help focus the learning resource centers operations and budget requests.

All budgets must detail in some fashion, not only the total amounts, but to where these funds are being allocated. For the learning resource center there are several broad categories which will encompass most expenditures: 1) Personnel which would include wages, salaries, benefits, training and education, and other related items. 2) Materials which include all items purchased for addition to the collection. 3) Equipment which would include any machinery or hardware necessary for the successful operation of the learning resource
center and its programs. 4) Supplies which would include all the necessary items used on a day to day basis. 5) Overhead which will vary greatly from library to library, but it includes such items as heating, lighting, insurance, etc.

II-2. Comparative Budgetary System

There are many different styles of budgeting. Each general format has its own strengths and weakness and each has a large number of variations. This section will examine the major budgetary systems in use today and will allow for a comparison of these approaches. This topology will include seven major formats of which several will be explained in detail because of their importance to the library system.

1. Lump Sum:

This system was once commonly used, but has begun to lose favor due to its lack of value to management systems which stress goals and objectives. This form calls for the allocation of a specific monetary amount and each management sector is permitted to spend that amount as it sees best. The categories of expenses are no different than any other system. There is just no other requirement to provide for such a list in advance.

2. Line Item:

This is probably the most common form of budgeting
system in use. This approach basically consists of a line by line listing of specific categories and the monetary amount requested for each expenditure area. There is no sacred division of categories, but each organization establishes this as based upon its individual characteristics and requirements. These items may be as broad or as narrowly defined as need to be and they may be altered from fiscal period to fiscal period.

The advantage of this approach is its ease in preparation. This style is quite easy to prepare and understand. The previous budget is often used as a base for the preparation of this budget. The library-media specialists generally favor this system because it requires no vast background in accounting, economics, or business. In addition, it is a rather easy system to justify. The disadvantages of this system are twofold. First, the system is often inflexible to changes after the fiscal period has begun. Second, the system allows for no relationship to be drawn between the amounts requested and the goals and objectives of the organization.

3. Formula Budget:

This is the disposition of funds based upon some formula derived from a comparison or resources and
needs. Predetermined standards are established and the funds are allocated based upon the standards as inserted into the set formula. The main focus of the system is input and the formula is nominally expressed in terms of percentages of the total.

This process has developed in popularity over the past fifteen years. Stewart and Eastlich have put forth overall possible explanations for this: (Stueart, 1981, p. 166)

1. The formula is mechanical and easy to prepare.
2. Because of applications to all institutions within the political jurisdiction for monies requested.
3. The governing bodies have a sense of equity because each institution is measured against the same criteria.
4. Fewer budgeting and planning skills are required to prepare and to administer the system.

This system also tends to assume a direct relationship between monetary expenditures and quality of service. This assumption could prove dangerous if adequate control steps are not taken to closely observe each budgetary unit.
4. Performance Budget:

This is a fairly recent addition to the lists of systems. The concept is premised upon the idea of budgetary distribution based upon the quality of service achieved and performed in relation to what each unit was designed to accomplish. It is a system based around organizational activities and there is a strong emphasis on cost-effectiveness. This program strongly relies on the successful accumulation of quantitative data which is accurate enough to support budgetary formation. This requirement can be a determinant to the program if such information is not adequately obtained.

5. Program Budget:

This is another relatively recent concept in budgeting. This system emphasizes activities by focusing upon specific programs whose needs are listed in a line item style. Each program should be carefully evaluated and retrieved for its relative effectiveness and should have assigned to it a request to allow for the successful accomplishment of its objectives. This system bears much resemblance to the line-item budget, except that each program is individually examined. Thus, activities are emphasized in a greater fashion than in the standard line-item format.
6. Planning-Programming Budgeting System:

The planning-programming-budgeting system (PPBS) first came to popular light during the Johnson administration in the mid 1960s. It is an attempt to combine the advantages of performance and program budgeting while hoping to cancel out the disadvantages. This is a system which emphasizes planning and stresses task and goal accomplishments. It translates these concepts into relative monetary figures which are considered to be representative of the demands for each unit. Jane Hannigan has identified several important aspects of this system: (Hannigan, 1972, p.1182)

1. There is a clear specification of goals and objectives.
2. Manpower utilization is clearly illustrate.
3. Resources, facilities, and priorities are clearly delineated.
4. Output is carefully monitored and evaluated.
5. Accountability for objective outputs are assured. There are many problem areas with this system. First, it can be difficult and time consuming to install, and may be impossible if managers are not properly trained. Second, specific quantitative data is not always available and may be difficult to obtain. Inadequate
information of this sort can be very detrimental to this system. Finally, it is not uncommon for appropriating bodies to act in an uncooperative manner and without such team-work the system can collapse.

7. Zero-Base Budgeting:

Zero-base budgeting (ZBB) is a system which is largely concerned with future needs and pays little attention to past demands. Each segment, sector, project, or program of the organization begins from point "zero" at the start of each fiscal period. They must all justify their request each time a new budgetary period approaches. This system involves two basic steps: the first of which divides the entire organization into component units or packages. Each of these units is a separate function or project and is predominantly independent of all other activities. (Hayton, 1977) These are basically the smallest units for which budget can be prepared.

The next step involves the priorities of each unit. Thus, decisions must be made pertaining to the relative importance of each fiscal unit. If the justification proves adequate then the unit may be funded. However if the justification is inadequate then the unit may be totally dropped from the budget.
The disadvantages of the system stem from the difficulties in implementation and continued utilization. Proper training is required or the system may collapse from within.
CHAPTER III
APPLICATION OF ZERO-BASE BUDGETING

All budgets are based on a long range plan for development. Once that plan has been developed and approved, the budget becomes the means for reaching those goals and objectives within a specified year. The librarian selects the amount of progress desired toward meeting the goals of the long-range plan based on available resources within that fiscal year. It is the responsibility of the library-media specialist to determine the cost of maintaining the collections and services, of keeping up with the changing collection, staff, services, space needs, and the implications of failing to meet these maintenance and development needs. And finally, to report this to the learning resource center director in a budget proposal.

III-1. Zero-base Budgeting: Defined and Identified

Chapter II has already discussed commonly used budgeting techniques. Zero-base budgeting differs from those techniques. This method of budgeting assumes that each year's budget requests are built up from zero in response to the expected priorities and needs of the
The system requires an organization to plan its expenditure programs in advance. They must identify and analyze, set goals and objectives and make decisions. The decisions are based on alternatives and possible increments of programs as viewed from multiple operating levels." (Denman, 1977, p. 6) L. A. Austin and L. M. Cheek developed the following definition of zero-base budgeting system: (Austin, 1979, p. 2) Zero-base budgeting is a planning and budgeting process requiring each manager to:

1. Establish objectives for his or her function and gain agreement on them.
2. Define alternative ways for achieving these objectives.
3. Select the most practical way of achieving each of these objectives.
4. Break that alternative up into incremental levels of effort.
5. Assess the costs and benefits of each incremental level.
6. Describe the consequences of disapproval.

There are two basic steps in zero-base budgeting. The first of these is the development of "decision packages." A decision package is essentially a set of objectives to be accomplished by a given program or
service along with a description of resource and cost requirements needed to accomplish those objectives. The second step is the ranking of the decision packages. This takes into consideration an evaluation process which places the packages in an order of importance through cost/benefit analysis.

The essential measure to be taken in zero-base budgeting is to present a decision package for every single component of the organization. This package consists of the program or project that is to be committed or agreed upon. It explains comprehensively the basis and rationale for undertaking the operation and also covers the advantages, impacts, developments, and the cost. These various aspects of the package should be carefully measured. The ultimate decision package should manifest possibilities and methods for completing the objectives toward which this endeavor is directed and also offers rational for rejecting other available alternatives. All organizational units must reach their final conclusions and the package must be assemble. (Koenig, 1980) The next higher level of management is required to evaluate and do the ranking on the various aspects of the proposed packages, either for the purpose of final revision or for submission to their supervisors.
Decision packages are not totally independent and free from the control and influence of various elements. A variety of units often share costs and resources and the procedure of functioning and operation of one program might be dependent on the extent of approval of another unit. For example, the decision package for the provision of reference service may depend upon approval of the collection availability package.

Decision packages could be applied in the following areas of the learning resource center.

- Administration
- Circulation
- Cataloging
- Reference
- Periodical Service
- Interlibrary Loan
- Automated Bibliographic Searches
- Document Services
- Audiovisual
- Microforms
- Acquisitions
- Preservation and Binding
- Auxiliary Services

A major planning effort is required by personnel
of the library when installing zero-base budgeting. The planning process provides the mechanism through which administration identifies and establishes the kind of programs needed by the faculty and students in the library. (Bliss, 1980) Other factors are also essential to the library's successful implementation of zero-base budgeting. A thorough knowledge of the organization is essential to develop an organizational strategy. The characteristics of the learning resource center, its objectives, organizational structure, and the strength and weakness of the current system are important points. (Chen, 1980) Information obtained from the thorough self-examination of the learning resource center, such as the identification of goals and objectives and inventory of current activities will provide a sound basis for long range planning. Stonich and others identify two situations in which zero-base budgeting may not be successful. These situations are: (Stonich, 1977)

1. The management is not interested in the process.
2. The organization is too small in size.

III-2. Failure of Zero-Base Budgeting

There are more reasons why zero-base budgeting is likely to fail than there are factors working for its successful implementation. Because of its complexity,
zero-base budgeting requires a great deal of staff time and effort, particularly in the beginning stage. Also, a great amount of paper work is required to prepare decision packages and their justifications. An institution that is not ready to devote the time necessary may fail with zero-base budgeting.

Developing and ranking decision units and packages is the heart of the zero-base budgeting process. But the construction of a precise and meaningful decision package is a long process and is very difficult to do effectively. If too many decision packages are developed, the zero-base budgeting system begins to strain under the paper work. If too few decision packages are identified, then the micro-budget analysis is diminished and the effectiveness of the zero-base budgeting system is minimized. The application of a zero-base budgeting system also requires extensive training and many members of the staff. Furthermore, the business model of zero-base budgeting is not easily applied to higher education. Many of the decision packages in higher education (public colleges) are required by state law or some other external regulations. The emphasis in higher education is not likely to be on total elimination of programs but rather on alternatives approaches to their
implementation.

Decision packages, prepared by decision unit managers, are subject to review by top management. A problem exists in that the administrator may not have the necessary knowledge of zero-base budgeting or of specific tasks or needs of departments. Thus, those reviewing may not always make the best decisions for the allocation of funds. (Chen, 1980) Support and understanding of the top level administration, particularly the president of the college/university is crucial to the successful implementation of zero-base budgeting.

Most public colleges and universities actually penalized administrators who save money. Generally, the money saved in one area simply is allocated to some other program. Unless the type of motivational pattern is changed, it is unlikely zero-base budgeting will have any positive effects. Without rewarding administrators who save money and who find more efficient ways of performing their activities, there is no real motivation for using zero-base budgeting effectively. Most current rewards go to those who get more staff and money in their budgets. Reward should go to those who are the most efficient and effective.

The concept of zero-base budgeting is simple; when
developing an organization's budget, it is better not to use the previous year's budget as a base. It promises "A system that rationally breaks up all spending requests, both old and new, into understandable manageable alternatives to enable people to discover the truth and falsity in each and allows all to compete on equal footing for scarce budget dollars. (Cheek, 1977, p.4) However, a question arises in regard to how this implementation is to be done in a nonprofit organization (learning resource center) and how the assessment of such a process will provide for more rational allocation of resources.

III-3. Zero-Base Budgeting in the Learning Resource Center

Zero-base budgeting does not appear to be a budgeting system that can be used by nonprofit organizations. Profit organizations are forced to relate their budget more closely to their goals and outcomes because if they did not, they would go out of business. Nonprofit organizations (learning resource centers) are not as critical to their income. For them, the goal is not making money but rather to provide a service. In profit organizations when a program cannot be justified in terms of its objectives and costs, it is usually terminated. In nonprofit
organizations, the termination of programs is not always possible because of different pressures. In these organizations money is not the main issue. Probably the single most important reason for the problem with traditional budgeting practice in the public sector (including public colleges) is that there has been no real reward for being efficient. Zero-base budgeting does not correct the motivational problem. It is worth mentioning that since every manager (especially in nonprofit organizations) will try to acquire as much funding as possible (it is only human nature to do so), evaluating priority is not as cut and dry as it theoretically seems.

There are more differences between libraries and other institutions. Newman and Wallender suggest that the service of the library is intangible and that the value, or benefit, to the library's output is difficult to measure in economic terms. Another difference is that libraries are professional organizations and the management literature notes differences in propositions and findings that except organizations which are highly professionalize. (Newman, 1978)

Because the library service is "intangible" and difficult to measure in economic terms, could we use zero-base budgeting which calls for annual review of
all programs from a ground zero? Before addressing this subject, it is essential to explain the types of expenditures in learning resource centers. There are four general classes of expenditures in learning resource centers. Each class may be defined differently by different learning resource centers, but for the purpose of this study, the following classification could cover all expenditures in any learning resource center.

1. **Personnel Related Expenditures**

   This category includes salaries, fringe benefits and wages of professionals, semiprofessionals, clerks and student assistants. In any budgetary process, one of the end-products of a learning resource center's budget will be an allocation of a great part of the budget to personnel (up to 60 percent of the budget). The present distribution of personnel budget will play a major role in determining the future. This is so mostly for non-budgetary reasons. Federal or state regulations and human relationships are equally as meaningful as budget figures on paper. (Martin, 1978)

   Since a great part of expenditures for learning resource centers relate to people and their salaries, fringe benefits and wages, this area needs special
attention. According to the National Center for Education Statistics, in 1978-79 academic year, 60.1 percent of college and university libraries' budget was spent for personnel related expenditures. In the academic year 1981-82, the figure was 60 percent. (National center for Education Statistics, 1984, p. 360)

The most difficult part of a budget to deal with are those that relate to people and staffing. In most cases, university and college libraries would not fire people (even if they could) if programs were eliminated. There are four basic ways in which administrators, professionals, and staff can be dealt with when the library decides to eliminate a program or activity. (Harvey, 1977)

Termination:

Most libraries, especially in public universities and colleges, will hesitate to use this method except as a last resort. Humanistic concerns, possible lawsuit, tenure policies, and other factors made this one of the last-used methods of reducing personnel. In most cases, an institution has the right to terminate employees if a program or activity is eliminated. The right is not often used, especially in public institutions of higher education.
Transfer:

Employees can be transferred to other areas within the university if the program is eliminated or reduced. This may be very difficult in libraries because of the nature of librarianship. The library staff usually can not use their profession outside of the library.

Resignation:

Generally speaking, there may be some ways in which an institution can promote timely resignation. An employee might be promised some special training in relocating in another area of profession. That could be possible for nonprofessional staff, but not true for professional librarians. Because of the nature of profession and tight job market in this field, relocating of librarians is not an easy task.

2. Materials Expenditures

Books are considered as including all purchases, monographic or otherwise, other than continuing subscriptions. Subscriptions cover periodicals, serials, series, newspapers and long term microform subscriptions. Binding includes the cost of the binding of periodical volumes and individual monographs. (Martin, 1978) Books expenditures is the category which has the greatest flexibility within a learning resource center's budget and is usually the
first to be cut when needed to balance the budget.

The amount allocated to subscriptions represents a permanent commitment to the learning resource center and the administrators cannot make any significant change in this part of the budget. The amount allocated to subscriptions cannot be subject to any change, as is the case for the minimal binding budget because most of the cost will be for the binding of periodical volumes. According to National Center for Education Statistics, in 1978-79 academic year, the amount allocated to periodicals and binding represents 14 percent of the operating expenditure of college and university libraries. In 1981-82, the figure was 15 percent. (National Center for Education Statistics, 1984, p. 360)

3. **Audiovisual Related Expenditures**

All purchases of media equipment (including computers), audiovisual materials, computer software, rental of equipment and non-pictures films, and repair of equipment are classified in this category.

4. **Services**

Expenditures in this area include communications (telephone, postage), maintenance, repair and renovation, and all other learning resource center operating expenditures.
CONCLUSION

Budget is a statement of the organizational goals and objectives in monetary terms for a specific fiscal period. It outlines and specifies the allocation of financial resources to various segment, sector project, or program of the organization. In zero-base budgeting administrators should not use the previous year's budget as a base (at least in theory) but rather to start from a zero-base and requires a justification of all expenditures. Theoretically, zero-base budgeting is a flexible budgeting system which can be implemented in any type of organization. Practically, zero-base budgeting cannot be used by nonprofit organizations (including learning resource centers). Profit organizations are forced to relate budget and income closely to their goals and incomes. In nonprofit organizations (including learning resource centers) the goal is not making money, but rather giving services. While the learning resource center's service is difficult to measure in economic terms, how can we implement zero-base budget which calls for annual review of all programs from a ground zero.

If zero-base budgeting did not have any impact on
personnel related expenditures (60 percent of the budget), subscriptions and binding (14 percent of the budget), the total effect of its use would be limited to 25 percent of most learning resource centers. The question arises how zero-base budgeting can be of any value where over 75 percent of the budget represents a permanent commitment to the learning resource center. This would seriously limit the value of zero-base budgeting and prevents the budgeting system from being truly "zero base."

Theoretically zero-base budgeting starts at zero. However, in practice, it usually does not start at zero, but some fraction of last year's expenditures. Previous learning resource center's budgets are vital in determining its current situation and financial needs. This fraction can be set at 60 percent or somewhat higher or lower depending on the situation. Pyhrr suggested that the minimum level be set at 50 to 70 percent. (Pyhrr, 1970)

Administrators of learning resource centers have very few choices to modify or eliminate any programs. As long as 75 percent of the budget (personnel and subscriptions related expenditures) represent a permanent commitment to the learning resource center and the 25 percent remaining practically does not start
at zero (but at 50 to 70 percent of the previous year), there is no room for "...Justification of an entire budget request in detail without reference to what has happened in the past." (Chen, 1980, P. 12) Perhaps the most cogent criticism of zero-base budgeting is that it requires a great deal of effort and results in very little or no change in the learning resource center. It is worth mentioning that some of the aspects of zero-base budgeting can be usefully added to a more conventional and less formalized procedure.
REFERENCES


