George Lucas, the producer of the Star Wars trilogy, made a telling point about budgets in THX 1138, his first feature length science fiction film. The setting is an underground society controlled by computers and patrolled by robot police. The hero makes a break for the outside, with the robots in hot pursuit. Just as the robots are about to overtake him, the computers order the pursuit to be halted. The cost of the chase has reached its budgetary limit!

Just as the budget determined the fate of the hero of THX 1138, so do budgets determine the educational experience of both faculty and students. Faculty are often told that a proposed project cannot be implemented for budgetary reasons. Similarly, budgetary reasons are given for salary increases (or lack thereof), benefit reductions, and shrinking support services. Yet many faculty are unaware of how to “read” or analyze a college budget, despite the fact that every aspect of academic life is influenced by an institution’s budget. What constitutes the entire budget of an institution? How can the real financial health of an institution be determined?

As educators we know that ignorance is rarely bliss. It is certain disaster in budgetary matters. Many faculty and staff associations have used NEA’s Budget Handbook for College Faculty and Staff to analyze institutional budgets. Through budget analysis conducted as part of collective bargaining preparation, impasse resolution, or political advocacy, employees have found solid evidence for an institution’s ability to pay for such things as salary

Dr. Leroy W. Dubeck is a professor of physics at Temple University. He has just completed a third edition of the NEA Budget Handbook for College Faculty. Dubeck has also conducted budget analyses of dozens of institutions of higher education and trains faculty and staff to analyze their own college budgets.
Now some changes in rules for accounting will have significant impacts on published college budgets.

increases and benefits, professional development, and additional full-time faculty.

Now some changes—effective for 1995-96—in rules for accounting will have significant impacts on the published budgets of most higher education institutions. This paper summarizes these changes, and highlights a few implications for faculty and staff. NEA's updated Budget Handbook for College Faculty and Staff—which will be available to NEA local affiliates soon—will provide a more in-depth guide to budget analysis, including a sample analysis.

Before discussing the changes, I first review the present status of higher education budgeting. I begin by defining accounting terms for types of budget funds and other aspects of college and university budgets.

Budget Terminology

Funds: An institution's budget consists of a large number of separate "funds." Funds are accounts used to record the value of "assets," "liabilities," and "fund balances."

Assets: Assets generally are divided into two categories. The first category is cash and that which can be easily converted into cash, such as investments and accounts receivable. The second category represents costs incurred at an earlier date that have not yet been attributed to a given period, such as buildings, depreciable equipment, prepaid expenses, and deferred charges.

Liabilities: Like assets, liabilities are divided into two categories. The first represents amounts that are owed to organizations or individuals outside the institution itself. Some of these liabilities must be paid immediately, while others can be paid out over a period of many years. The second category of liabilities represents amounts that have been collected in cash but have not yet been earned by the institution. Until this cash has been earned, it is carried as a liability to offset the fact that the cash itself is car-
Yet administrations sometimes claim a financial crisis because one fund—the general fund—is depleted.

ried on the books as an asset. An example is tuition received by an institution in the spring for the following fall semester.

Fund balances: In fund accounting, for each fund the difference between assets and liabilities is called the fund balance.

To summarize:
FUND BALANCE = ASSETS - LIABILITIES

In order to determine the financial status of an institution we seek to determine the fund balances in all of the funds of an institution.

Colleges have many funds—for example, a general fund, a fund for the bookstore operation, a fund for dormitories, and a fund for each grant or contract awarded.

One can transfer moneys between funds (unless there are restrictions as to the use of certain funds). An analogy that may make this clearer is to equate funds to bank accounts. If an individual has $50,000 in one bank account and $10,000 in another account, that individual's net worth (assuming no liabilities) would be $60,000 and would not be affected by transferring $5,000 from one account to another.

Consider another example. A friend overdraws a bank account by $1,000 (the fund balance in that account is -$1,000). Is that friend in financial trouble? One can't answer the question with only the limited information provided. Perhaps the friend has $50,000 in another bank account. We don't have enough information to make an overall financial judgment on this individual.

Yet administrations sometimes claim a financial crisis because one fund—usually called the general fund—is depleted, oftentimes by transfers to other funds within the institution. I have found that the most common budgetary misunderstanding by faculty members is to confuse the general fund budget (and its fund balance) with the financial status of the entire institution.

In order to understand the financial status of a college or university you need to know the fund balances and changes in fund
balances for the most recent year for all of the institution's funds.

In addition, you need to know the distribution of these fund balances among the three categories of funds for institutions of higher education. Through the 1994-95 fiscal year most institutions have segregated their fund balances into these three categories.

Unrestricted funds: Resources that an institution may use for any purpose.

Restricted funds: Resources that have external, legally binding restrictions upon their use. For example, a government grant may only be expended for the purpose for which it was awarded. However, if the grant award contains indirect charges, those costs are considered unrestricted income. Gifts may carry legally binding restrictions on their use. Sometimes administrators claim that they do not have control over certain funds because the governing board has placed restrictions on the use of these funds. Such funds are often referred to as “designated funds” or “quasi-endowment funds.” Yet they are legally unrestricted funds because the restrictions on their use have been placed on them by the governing board and can be removed by that very same board at any time.

Net Investment in Plant: This third type of fund balance represents the value of the physical assets of an institution, and has been segregated from unrestricted funds in the past, presumably because an institution could not sell all of its buildings and still operate. As we shall see, that segregation will no longer exist in the future.

Sources of Budget Information

The best sources of information about all of the fund balances of an institution are in its annual audited financial statements. In those documents, external auditors confirm the amounts of the fund balances as well as their distribution among unrestricted funds, restricted funds, and net investment in plant.

Most colleges or universities produce audited financial statements annually. For the few that do not, it may be difficult or impossible to confirm the precise fund balances for that institution.
One must have the actual results for a year to know whether an institution ran a deficit or a surplus.

Unaudited operating budgets can often be misleading. They are estimates of financial plans for a forthcoming year and such estimates may, for example, underestimate income and overestimate expenses to portray a deficit for a given year that will not occur.

One must have the actual results for a given year to know whether an institution ran a deficit or a surplus. Thus, in the analysis of institutional budgets, the most reliable information is always for budgetary years that are completed. The information about a current budget year always has greater uncertainty associated with it.

One may be able to estimate whether an administration deliberately budgets conservatively by comparing budgeted revenues and expenditures to actual revenues and expenditures over a number of years. If the institution consistently ends up performing better financially than budgeted, it is probably deliberately underestimating revenue, overestimating expenses, or doing both.

Components of Budgets

At present, audited financial statements contain four required statements:

- Balance Sheet (by funds)
- Statement of Current Funds Revenues, Expenditures and Other Changes
- Statement of Changes in Fund Balances
- Notes to Financial Statements

The balance sheet combines funds into several broad categories. Below is a typical set of such groupings:
The presentations of these financial statements are modified from time to time by new regulations.

<table>
<thead>
<tr>
<th>Current Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>The General Fund</td>
</tr>
<tr>
<td>Designated Funds</td>
</tr>
<tr>
<td>Auxiliary Activities</td>
</tr>
<tr>
<td>Expendable Restricted</td>
</tr>
</tbody>
</table>

**Student Loan Funds**

**Endowment Funds**

**Physical Plant Funds**

<table>
<thead>
<tr>
<th>Current Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>The General Fund</td>
</tr>
<tr>
<td>Designated Funds</td>
</tr>
<tr>
<td>Auxiliary Activities</td>
</tr>
<tr>
<td>Expendable Restricted</td>
</tr>
</tbody>
</table>

The Net Investment in Plant category of funds are found under the Investment in Plant fund subgroup. The Expendable Restricted are restricted funds. The General Fund, Designated Funds, and Auxiliary Activities are normally all unrestricted funds, while the remaining fund groups may contain both unrestricted and restricted funds balances.

While this may seem complicated, it is actually fairly easy for someone familiar with audited financial statements to find the unrestricted funds that are located in all of these fund groups, provided that audited financial statements exist. I have done this for over 30 colleges and universities.

It should also be noted that institutions sometimes move unrestricted funds into foundations that are separate entities but wholly controlled by the institution. For example, grants may flow through the foundation which keeps some or all of the indirect cost (“overhead”) funds and transmits the direct cost funds to the institution to perform the work required under the grants.

**Recent Changes in Budget Formats and Definitions**

The presentations of these financial statements are modified from time to time by new regulations promulgated by either the Financial Accounting Standards Board (FASB) or the Government
One new rule results in the appearance of a large decrease in the value of Net Investment in Plant.

Accounting Standards Board (GASB).

Here are the major accounting changes that have occurred since the publication of the NEA Budget Handbook for College Faculty and Staff in 1989.

Depreciation

For fiscal years beginning after January 1, 1990, FASB 93, Recognition of Depreciation by Not-for-Profit Organizations, requires that institutions apply depreciation in their financial statements.

This results in the appearance of a large decrease in the value of Net Investment in Plant for the first fiscal year (usually 1990-91) in which depreciation is applied, due to the effect of subtracting at one time the cumulative depreciation of all long lived assets since their purchase.

For example, if buildings are depreciated over a 40 year period, a building that is 20 years old in 1990-91 would have half of its initial value "depreciated" that year. Until FASB 93, long-lived assets were carried on the books at their original purchase price.

Post-Retirement Benefits

The next major accounting change is FASB 106, Post Retirement Benefits Other Than Pensions, which went into effect for fiscal years beginning after December 15, 1992. For most colleges this was their 1993-94 fiscal year.

This requires the institution to reflect in its financial statements as a liability the actuarially determined cost of its post-retirement benefits other than pensions. Typically these benefits include health care benefits, life insurance, and educational benefits for the children of retired faculty members and staff.

Prior to this rule the costs of these benefits were recorded as they were made, but no provisions for future costs were made in the audited financial statements. The projected costs can be immense. For example, in 1993-94 the actual expenditure by Temple University for such costs was $1,996,000. Yet the projected future cost associated with this was given in Temple's 1993-94
audited financial statements as $59,214,000.

Some institutions have eliminated or reduced these benefits, or required co-payments by employees, when faced with recognizing these large future obligations. It is difficult to accurately estimate the value of such obligations, since the cost is determined by such factors as the increase in cost of providing future health benefits 20 or 30 years from now and the average retirement age of the institution's covered employees. The later employees retire, the fewer the years for which retirement health benefits will be provided). These are obviously difficult to determine with great accuracy. At best these numbers are educated guesses.

**Donations, Contributions and Pledges**

Effective for fiscal years beginning after December 15, 1994, i.e. with the 1995-96 fiscal years of most not-for-profit institutions, there are two new FASB statements which must be applied. The first of these is FASB 116, Accounting for Contributions. The second is FASB 117, Financial Statements of Not-For-Profit Organizations.

At present colleges and universities record donations when they are received. Under FASB 116, institutions will be required to record contributions, including pledges, when received. Contributions must be unconditional, voluntary, and non-reciprocal. Contributions are defined as an unconditional transfer of cash or other assets to an entity or a settlement or cancellation of its liabilities in a voluntary non-reciprocal transfer by another agency acting as other than an owner.

At present, the expiration of restrictions on contributions is recognized when the money is spent. Under FASB 116, "A not-for-profit must recognize the expiration of donor-imposed restriction in the period in which the restriction expires, that is, when the stipulated purpose for which the resource was restricted has been fulfilled, when the stipulated time has elapsed, or when another stipulated event has occurred."

The result of the above changes is that the unrestricted assets of the institution will increase compared to the present system,
since some of the pledges are for unrestricted funds, and restrictions on other funds will be removed sooner for some contributions than at present. In addition, due to changes in definitions under FASB 117, contributions will be categorized as either unrestricted, temporarily restricted, or permanently restricted.

A further change due to FASB 116 is that the value of contributed services, which do not presently appear on most institutions' financial statements, must be recorded as contributions if they created or enhanced non-financial assets, or if they require skills that must be provided by specialists and which would typically need to be purchased if not provided as a donation. This change will further increase the contributions recorded.

Finally under FASB 116, certain contributions of works of art do not have to be recorded as revenue as long as they meet the following criteria: held for public exhibition, education, or research in furtherance of public service rather than financial gain; protected, kept unencumbered, cared for and preserved; and subject to an organizational policy that requires the proceeds from sales of collection items to be used to acquire other items for the collection.

Obviously, if a college or university has negligible contributions, these changes will have little effect on its "bottom line."

New Categories for Budget Asset Reporting

FASB 117 will have a much greater impact on the budgets of most colleges and universities.

First, it changes the categories of assets. As indicated previously, the three categories at present are unrestricted, restricted, and net investment in plant. Under FASB 117, the definition of "unrestricted funds" changes to include "net investment in plant." This means that for fiscal years 1995-96 and beyond, colleges that adopt FASB 117 will report a new category:

New Unrestricted Fund Balance = Old Unrestricted Fund Balance + Net Investment in Plant.

This will generally mean a huge increase in the Unrestricted
Higher education institutions may expend part or all of the income from donated assets.

Fund Balance as of June 30, 1996 compared to June 30, 1995—an increase that is simply the result of an accounting change. The auditor’s Notes to the Financial Statements will no doubt reflect this accounting change.

However it is the increase in the Unrestricted Fund Balance not due to its inclusion of Net Investment in Plant or of unrestricted pledges that is of greatest significance. That portion of the increase in Unrestricted Funds can often be identified by employees as a source of funds to pay staff salaries and benefits or to avoid layoffs.

In addition to the new Unrestricted Funds, under FASB 117 there will be two categories of Restricted Funds.

Permanently Restricted Assets are those resulting from donor-imposed restrictions that these assets be maintained permanently. However, the institution may expend part or all of the income from these donated assets. The clearest example of permanently restricted assets is the historical value of true endowment funds. Changes occur in this class of assets from additional contributions, gains or losses on investment transactions if these gains must be retained permanently, income from investments if this must be added to the permanent endowment, or a transfer of endowment assets to another entity by judicial or similar authority. Basically, the permanently restricted assets are the true endowment funds.

The second category of restricted funds are Temporarily Restricted Assets, which also result from donor-imposed restrictions that permit the institution to only expend the donated assets as specified. These restrictions may be satisfied either by actions of the institutions or the passage of time. Temporarily restricted assets may be restricted to support only a particular activity of the institution, may be required to be invested for a specified term (“term endowment”), or may only be used after some future date. Assets listed as Restricted under the current accounting rules will become Permanently Restricted funds if they are true endowments, while the remainder will become either Temporarily Restricted or Unrestricted under FASB 116 and 117.
New Financial Statements

There will also be three new Financial Statements under FASB 117.

Statement of Financial Position. First, there will be a Statement of Financial Position that will replace the present Balance Sheet by Funds. FASB 117 requires that this statement, together with accompanying notes, provide the total amount of assets, liabilities, and net assets; the total amount of each class of net assets—unrestricted, temporarily restricted, or permanently restricted; information about restrictions on net assets; and information about liquidity.

Information about liquidity may be provided in a number of ways. Assets and liabilities may be sequenced according to their nearness to cash.

In this format, the most liquid assets (cash and cash equivalents) would be stated first, followed by those that would convert to cash in the near future (such as accounts receivable) and finally by those that would not usually be converted to cash (such as property, equipment, and plan.)

Liabilities would be listed by nearness to maturity, starting with accounts payable and accrued expenses and ending with long term debt. The notes also normally contain other information about liquidity such as the annual maturity of long term debt over the next five years.

The institution has the option of preparing the Statement of Financial Position as a single column “corporate” model; as a set of columns, one for each class of net assets and a totals column; or as an “operating/capital model” which divides assets, liabilities, and each class of net assets between items used in ongoing operations and those retained for capital expenditures.

The drawback of the single column model is that the reader may be misled into thinking that the institution has more assets (i.e. those Net Assets listed as unrestricted) available for the operation of the institution than is actually the case, because most such assets may be Net Investment in Plant.

Statement of Activities. The second financial statement
required by FASB 117 is called a Statement of Activities (Income Statement).

FASB 117 identifies three possible formats for this statement. Format A is a single column of revenues, expenditures and other changes for a given fiscal year. Format B is a multi-column format of the same information, with a separate column for unrestricted, temporarily restricted, and permanently restricted funds, as well as a total. Format C is a two-statement approach. One statement would list unrestricted revenues, expenses and other changes in net assets while the second statement would list changes in net assets.

Among the important changes that will be displayed in the Statement of Activities are that all expenditures will be made out of the unrestricted funds, depreciation will be treated as a current expense, and revenues will be recorded in fund by type of restriction. Donor-restricted contributions that are met in the same reporting period that contributions are made may be reported as either unrestricted revenues or temporarily restricted revenues.

The expenses are to be categorized by standard categories such as Instruction, Research, Public Service, Academic Support, Student Services, Institutional Support, Operations and Maintenance, Scholarships, and Auxiliary Enterprises.

However, for one institution that is in the process of changing its financial statements to those required by FASB 117, I have seen small differences in the values of expenditures for many of the above categories between the old and new financial statements. Even small differences will have an adverse affect on a trend analysis over a period of several years of expenditures in each of the above categories. This kind of analysis can highlight, for example, a decrease in the relative percentage of expenditures going to instruction or an increase in administrative costs.

Another university listed its expenses by categories such as Compensation, Fringe Benefits, Utilities, and Telephone (so-called “natural” expense categories) rather than categories such as Instruction and Research. This type of financial reporting makes it impossible to do trend analysis by the traditional categories.
The new financial statements mandated by FASB 117 may be much harder to understand.

used in higher education budgeting.

Statement of Cash Flow. The third required statement is a Statement of Cash Flow. The purpose of this statement is to provide relevant information about the cash receipts and cash flow of the institution for a given fiscal year.

The minimum requirements are that this statement provide: total changes in cash and cash equivalents; total amount of net cash provided by or used for investing activities, financing activities, and operations; interest paid on debt; and a reconciliation of change in total net assets to net cash provided by or used by operations.

There are two methods of presentation of cash flows. The Direct method reports cash inflows and cash outflows by the major classes of specific activities. This approach would be far easier for a faculty member to understand since the cash received would be related to activities such as instruction or research.

The second method, called the Indirect Method, starts with net change in total assets for a given fiscal year and makes numerous adjustments to that number for the fiscal year to indirectly determine the cash flow. For example, one adds back the expense of depreciation (since this expense did not involve spending cash) but one subtracts the amount for accounts receivable since this does not involve cash in hand. The indirect method is easier for financial officers to prepare but much harder for faculty to understand. Yet, each of the financial statements that I have seen to date prepared under FASB 117 used the Indirect Method of determining cash flow!

Summary

These changes in reporting definitions and categories, and the new financial statements mandated by FASB 117, may be much harder to understand and less useful to faculty and staff if the administration adopts certain options in preparing the reports. Faculty and staff must pressure administrations to keep these statements “user-friendly” if they are to be of meaningful value to
the academic community in the future.

Understanding budgets and financial statements can provide faculty and staff governance groups and collective bargaining agents with powerful tools for advocacy of improved salaries and benefits, as well as better conditions for teaching and scholarship.

The new edition of a Budget Handbook for College and University Faculty and Staff, published by NEA and written by me, contains sample financial statements in both the prior formats and the new formats mandated by FASB 117. The handbook provides a sample analysis of a college budget, insights into the true constraints and flexibilities in budgets, and alternatives for institutions facing fiscal crises.