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WHAT DOES AN ACADEMIC PROGRAM *REALLY* COST?

Academic Institution Cost Characteristics:

Activity-based costing can be used in determining the "real" costs of higher education programs. By knowing the "real" cost of a program, it would be possible to find the low cost programs, or to carry the analysis one step further, the most profitable programs. Traditionally, colleges and universities have concentrated on variable costs of programs to determine their educational programs. For example, adult evening programs are established based on the concept that the buildings exist, the administration is in-place, etc. so that the only additional cost is the direct cost of additional faculty. Since the costs only include additional faculty, the tuition for these programs is often far less than the full time day student's tuition. It appears these programs are extremely profitable. Over time, some of these programs have expanded to the point where they constitute 30-40 percent of the student body. The additional overhead of business office costs, registrar costs, additional library hour costs, etc. caused by these programs continues to be allocated as overhead to full time day education.

In reality, what happens is the day school subsidizes the adult programs. The same phenomenon may be occurring between other programs as well. Activity-based costing works very well in spotting such cross subsidization of products, i.e., programs.

A major characteristic of higher education costs is high overhead costs. Activity-based costing was originated to more accurately allocate overhead costs in high overhead cost business. Colleges and universities fit this description. The direct labor costs are small in comparison to the overhead costs.

Higher education also is characterized by a diversity of products, i.e., undergraduate programs, graduate programs, research, high tech vs. low tech programs, and other characteristics of diversity. Activity-based costing is helpful in allocating the proper overhead costs in such an environment.

For example purposes, three specific programs, primary education, sociology and physical therapy, will be evaluated. A process of determining the "real" cost of these programs at an institution is described. Once the "real" costs are found, the income for the programs could be determined and the profitability of each program could be determined. This information could then be used to decide which programs are most profitable for the school.

The diversity of other programs at a school will have a significant effect on the cost allocation to each of the mentioned programs. The process presented should be applied to all of the school's programs to determine the mix of programs that can be most profitably offered by the institution.

Another effect on the cost structure of an educational institution is student living costs. In the process described here, student living costs like dormitory and eating facilities are assumed to be a separate entity funded and run through room and board income and not tuition. Essentially, only the academic portion of the institution is considered.

Applying Activity-based Costing:

Several things must be done to apply activity-based costing. First of all, a school must adopt the concept of program budgeting and accounting so costs can be collected and allocated according to the program. This is a non-trivial change. Next, all costs that can be directly

associated with a program should be charged to that program. The examples shown below are very broad categories. In an actual implementation of activity-based costing, there would be more specific cost pools and activities depending on a great deal of analysis. For all three programs being considered in the example, such costs as the following can be directly associated with a program:

- (1) faculty costs,
- (2) academic administrative support linked to the program or faculty supporting the program,
- (3) physical plant directly associated with the program, for example, a school of education building or physical therapy technology wing of a hospital, and laboratories,
- (4) academic equipment, if dedicated to a department including items like computers, lab equipment, presentation media devices and supplies,
- (5) academic administration dedicated to a program,
- (6) off site costs such as coordinating student teaching.

The remaining costs should be considered overhead and allocated to cost pools. These cost pools would then be allocated to activities using resource cost drivers. Activities are any events or transactions that act as a causal factor in the incurring of cost to an organization. Typical cost pools for a university and a potential resource cost driver for each are listed in Table 1, Cost Pools and Resource Cost Drivers.

TABLE 1

COST POOLS AND RESOURCE COST DRIVERS

<u>COST POOL</u>	<u>RESOURCE DRIVER</u>
physical plant -- not directly associated with a program but used by a program	square feet

financial aid	number of applications
student services	number of visits
general lab equipment -- not directly associated with a program but used by a program	number of hours of use
business office	number of transactions
registrar	number of transactions
library	number of volumes weighted by cost of volume

Possible activities in an educational institution could be among those shown in Table 2 below. The cost pools are allocated to the activities based on resource cost drivers. For example, research would receive a large part of the physical plant, general lab equipment and library costs while recruiting would only be allocated a small amount of physical plant, assuming their office space is relatively small compared to the library.

Another example would be financial aid. It would receive all the costs associated with the financial aid cost pool plus some of the costs associated with the physical plant because of their office space.

TABLE 2

ACTIVITIES AND ACTIVITY COST DRIVERS

<u>ACTIVITY</u>	<u>ACTIVITY DRIVER</u>
Recruiting	number of contacts
Registration	number of students
Financial aid	amount of money
Student services	number of contacts
Research	average hours used by student
Classroom sessions	number of credit hours

Then, each program can be evaluated on an individual basis by removing it, or adding it, to the mix of programs the school offers.

Activity-based costing will clearly show what is driving the costs of the various programs and will show where to most effectively cut costs.

Most articles researched for this article were published before activity-based costing became popular, but they provided information on how schools look at costs. It was interesting to discover that the concept of activity-based costing shows up in some of these books that were published 20-30 years ago, yet very few schools today know the "real" costs of their programs. Is this true at your institution?

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