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ABSTRACT

This article discusses alternative possibilities to financial problems within funding programs. Areas covered include faculty load, faculty compensation, course additions, and course scheduling. (MJM)

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The University of Toledo

EDITORIAL OPINION

AN ISSUE OF CONCERN TO ALL FACULTY TODAY

Throughout the history of American higher education, the most idealistic of educational philosophies have always come under the excruciatingly critical eye of the individual institution's financial officer who was primarily concerned with but a single question: "Can we afford to do this?"

It has always taken an inspired president to step off the brink with a radical idea and forge ahead, regardless of the cost, risk, or uncertainty, simply because a particular educational program or idea needed to be done. No one in his right mind would counsel a hasty decision on any matter which could affect the financial solvency of a given institution.

Yet today, for many and diverse reasons, the financial solvency of an increasing number of institutions is up for question. A recent report from The Association of Independent Colleges and Universities of Ohio* points up "the present critical financial condition and the future prospects . . ." of the so-called small private college in the State of Ohio. Some of these institutions will simply require more funding from an additional source if they are to survive. While some institutions are cutting back on filling faculty vacancies, others are holding faculty salaries constant — with possibly not even a "cost of living" increase to be expected for their faculty this year.

The problem, though, is not limited to the smaller colleges. Certain major institutions with considerable prestige throughout the country are reporting sizeable deficits in spending — institutions which have never before been "in the red" throughout lengthy histories of educational service.

* The Association of Independent Colleges and Universities of Ohio. *Toward An Effective Utilization of Independent Colleges and Universities by the State of Ohio* (January 1971).

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Systems of public education are experiencing the effects of a "tight money economy" and almost every institution appears to be looking for ways of "holding the line" or cutting "unnecessary costs." Today just about any professional gathering — even vaguely related to higher education — can be counted upon to produce at least one speaker to deal with the "crisis in financing." Accountability has become our watchword.

It seems clearly appropriate, therefore, to focus an issue of CRITIQUE upon the subject of college finance. General facts and figures describing the nature of the crisis can be found elsewhere — probably within your own institution. The intent of this issue is to allow one man to speak directly to individual faculty members at varying institutions on this matter. How clearly he has done this remains for you to judge. Your comments — both critical and otherwise — continue to be welcome.

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NOTES TO A COLLEGE FACULTY MEMBER ON FINANCE

Richard E. White*

Almost universally, whenever the subject of financing higher education arises, most of the discussion focuses on either theoretical economics or the discreet amount of state appropriations that a given institution needs or expects. While both of these aspects are important, little information is ever supplied to the general faculty member as to the process by which financial decisions are formulated or the way particular decisions that may influence the financial operation at an individual institution are made. Hopefully, this paper will begin an effort to fill this gap for the faculty member.

Let us look for a moment at the state legislative process as a means of financing public higher education. There are, of course, other taxing units presently being used to support public colleges — municipalities, community college districts, school districts, etc. — but the legislative process illustrates one important point.

Several years ago a department chairman at a large university was heard to encourage members of a particular faculty committee to simply go to the legislature and tell its members that the university needed greater appropriations. He did this in complete confidence that such a statement was all that was needed. Generally, today we can agree that this approach is naive. A given individual voice here and there is not nearly so effective as a unified group representing a particular college or faculty in higher education. Typically, requests from governmental agencies far exceed the income from all revenue sources within any given state. The legislators have few alternatives: increase revenues, pare budgets, or evolve some combination of both.

In influencing appropriations from the legislature, however, higher education administrators and faculty members have only one choice: they must vigorously defend and explain their educational programs and related appropriation requests. Throughout the legislative hearing process, bill preparation, and final appropriation act, it must always be remembered that a final compromise will take place. This compromise in some way will reflect the value judgment of the legislature as to the importance of various programs in the total financial effort of the state. Higher education is but one such program.

Consider further the formulas advanced or published as a base for an appropriation. Although

the total dollars have been decided with a variety of decisions, the formulas do reflect legislative intent. For example, a student-faculty ratio of 24:1 and an average staffing compensation level of \$12,000 for each faculty member at that level of instruction means what it says. Simply put, the legislature is saying that the instructional effort should be sustained with these two average factors, student-faculty ratio and class size. Needless to say, an institution sometimes tries to use its appropriation at variance with the model factors, and indeed, minor adjustments and changes are to be expected. However, wide changes or deviations from the legislative intent can only be expected to lead to tighter mandates and scrutiny of future budgets. In fact, many states already operate under a line-item appropriations system whereby money may not be moved from one item to another within the budget without approval of a state administrative or legislative agency.

Substitute the board of trustees for the legislature in the case of a private college and the situation is almost analogous. In this case, though, the board approves a budget reflecting the departmental requests and the estimated income, balancing priorities to reach final decisions. The level may differ but the process is precisely the same.

After appropriations are made, there are several factors that individual faculty members should know and utilize to make the most of an expenditure plan.

Faculty Load

Most faculty members are correctly concerned with class size. A number of the new negotiated master contracts have specified maximum class sizes, and it is to be presumed that an assumption was made that such specification would control faculty load. However, in light of appropriation formulas or assumptions, the faculty should be more concerned than they have been in the past with the student-faculty ratios for instructional purposes. A corollary concern, to be covered below, should be that of the average staffing compensation.

The product of the educational program is the "educated graduate." However, measurement of productivity in a college has not yet developed to the point where the assessment of graduates is precise enough to determine for budgetary purposes the "output" of an individual faculty member, or the total faculty. As much as many faculty members would like not to be faced with such a measurement unit, even with many limitations, the

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student credit hour is currency clearly utilized as the most useful factor in making budgetary comparisons.

For example, a "student" is defined as 15 student credit hours of enrollment during a term. Hence, a 24:1 ratio means that the average faculty member must produce 360 student credit hours of enrollment in his classes during a term. If, however, the faculty has a contractual agreement limiting class size to 25 students and the teaching load to 12 hours of classes, it is impossible for the institution to remain solvent within the confines of the instructional budget. In this case, the student credit hour production is only 300 per faculty member, a shortage of 16.67 per cent. If that faculty insists upon maintaining the class size and teaching load of 25 and 12, then faculty compensation will need to be cut by the 16.67 per cent, or else other funds will need to be discovered in order to maintain a balance.

Table I illustrates the relationship of staffing ratios and teaching loads to average class size.

Table I
Average Class Sizes Necessary To Support
Varying Student-Faculty Staffing Ratios
And Credit Teaching Loads

Credit Hour Teaching Load	Student-Faculty Ratio				
	8:1	12:1	16:1	20:1	24:1
1	120.00	180.00	240.00	300.00	360.00
3	40.00	60.00	80.00	100.00	120.00
6	20.00	30.00	40.00	50.00	60.00
8	15.00	22.50	30.00	37.50	45.00
12	10.00	15.00	20.00	25.00	30.00
15	8.00	12.00	16.00	20.00	24.00

It is obviously an exercise in simple arithmetic, multiplying the student-faculty ratio by 15 credit hours per student and dividing the result by the credit hour teaching load in order to obtain the average class size. Nevertheless, it is important to show the budget implications.

A second illustration: If a private college is now operating on a 12-hour teaching load and has a 12:1 student-faculty ratio, an increase in ratio to 16:1, or increasing average class size from 15 to 20, will provide a one-third improvement in the instructional budget. This, to be sure, assumes that all other factors remain constant. Hence, an institution with an expenditure plan designed for a 24:1 ratio and a 12-hour teaching load must average 30 students per class or take funds from

other institutional expenditure items to support instruction.

Furthermore, it must also be remembered that these illustrations have described the average teaching faculty member. Assuming that no funds have been appropriated for faculty research time or other non-instructional activities of the instructional staff, released time for even a single faculty member changes the load factor for all of the others. The others must increase class size to cover the non-production of student credit hours by the released time.

The point of the above illustrations is simply to demonstrate that faculty consideration and understanding of the mathematical options in varying class sizes and teaching loads may permit them to make suggestions that could improve budget operations of a college. As before, a college of 100 faculty members on a 20:1 ratio may release five faculty members from teaching classes to do other important activities and only increase the class sizes for the other 95 faculty members by slightly over one student per class.

Faculty Compensation

Similar comments may be made with regard to faculty compensation. Each faculty member would like as much compensation as possible. However, the funding formula clearly determines the amount available to be paid in faculty salaries. Using the \$12,000 compensation level (including fringe benefits), the average faculty member above needed to produce 360 student credit hours at 24:1 and a 12-hour load. Class size was thirty.

If now the institution is forced to compete for faculty members at an average compensation of \$14,000, class size must go to 35 per teaching faculty member, if the budget is to be balanced. Obviously, the reverse may also be true. That is to say, if the class size cannot be increased beyond an average of 25, the average faculty member can only receive about \$10,000 in compensation. An institution operating on a 12:1 ratio which moves to a 16:1 ratio, with the \$12,000 compensation level, could move to a \$16,000 level. Operationally, some alteration might also need to occur to maintain the previous compensation level, or provide a more modest increase, if costs are outstripping income.

In other words, the most important factors in varying the models around which an institution must make such a decision appear to be simply these: teaching load, student-faculty ratio, and faculty compensation. These three have the most

immediate impact on the budget of the institution. But there are other items that also influence the instructional budget.

Course Additions

Most colleges are regularly faced with the addition of new courses by departments. These increases may be entirely justified on academic grounds. However, the addition of each course increases the instructional budget. A four-hour credit course offered one quarter per year is one-ninth of a 12-hour teaching load, or \$1,333 of an average \$12,000 compensation. If the college is on a semester schedule, then it is one-sixth, or \$2,000. Offering the course each term would correspondingly increase the cost to \$4,000 per year. Offering it once every two years changes the cost to \$667 or \$1,000.

An additional course, furthermore, increases expenditures and subsequently the income must also increase in order to hold the budget balance and consistency. An increase in enrollment for the institution will permit the course addition, provided that a portion of the new income may be allocated to the new course without reducing the allocation to existing programs. In other words, the institution must have "excess" program money to be spent on the new course. Any other alternative can do nothing but reduce by some amount the support for other program elements. For example, assume that a particular department adds one course per term while the college's enrollment and all other factors remain constant. The student credit hours of enrollment in that course will be diverted from other subjects, requiring a financial re-evaluation of the total program.

Some theorists have attempted to argue that

new courses can be added without increasing staff and costs. Not so! The point of the above comments is that each course clearly has implications for financial structure and must be examined accordingly.

Course Scheduling

These comments about course additions may be easily transferred to scheduling. The faculty needs to evaluate class and section scheduling as they relate to student programs. It may be possible to offer classes on a cyclical basis without disrupting programs, thereby improving class size to increase allocations under the funding model. Avoidance of conflicts in scheduling can also improve the financial operation.

To illustrate, if the average full-time student enrolls for 14 hours in one institution and 16 in another, the same headcount will result in over 14 per cent less funding for the first institution on a student credit hour base. A similar relationship exists in degree requirements. A 192-credit degree program, versus 186, will require over 3 per cent more staff in a funding model.

In Conclusion

The comments and illustrations in this paper are presented to encourage and stimulate faculty to think about the alternatives available to them and to college administrators as they struggle with college financial planning. Other illustrations could be developed on the same theme, or the above expanded. But my point is simple: Financial problems do have some solutions within present funding patterns. It only requires a concerted effort to explore the alternative possibilities.



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