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ABSTRACT

In this sourcebook, nine contributors explore the issue of reduced resources for community colleges in the current period of decelerating growth. S. V. Martorana describes how public two-year institutions have become increasingly dependent on state and federal financial support, resulting in losses of college autonomy. W. Gary McGuire examines state support patterns in 39 states, with a majority reporting "stabilized" funding conditions not far removed from the declining resources condition. Lee G. Henderscn explores the burgeoning role of state agencies. Two models for retrenchment are presented by Herbert M. Sussman, based on responses to operating budget cuts at New York City Community College. Richard DeCosmo considers how budget cuts effect curriculum and instruction, and Jane E. Matson outlines reduction effects on student personnel services. James L. Wattenbarger discusses two approaches for administrative planners facing resource reductions, while Richard C. Richardson reviews the types of problems administrators will have to face in future, concluding that careful institutional research and planning can help maintain or increase institutional effectiveness. Dorothy M. Knoell and Richard L. Alfred look at some heretical concepts for community colleges to adopt in order to maintain the growth that characterized their early years. A pertinent bibliography is included. (Author/TR)

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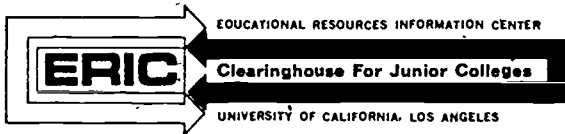
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coping with reduced resources

richard l. alfred



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COPING WITH REDUCED RESOURCES

New Directions for Community Colleges

Number 2, Summer 1978

Richard L. Alfred, Issue Editor

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editor's notes

During the 1960s the predominant theme in community college education was quantitative growth—development of new programs and services and physical expansion of facilities to serve a rapidly expanding student clientele. Two-year colleges gained credibility as comprehensive institutions capable of offering programs and services where none had existed before. Resources were plentiful, and staff were added in unprecedented numbers to build new programs or shore up existing ones. The size of the budget was not a critical issue because unallocated funds were always available to support a new program or to cover an unanticipated situation. As a result, community college faculty and administrators came to believe that all emerging needs could be met by constantly expanding financial resources.

The view in 1978 is greatly altered. Federal and state agencies and the public-at-large debate the question of overinvestment in community college education, enrollment contraction, prospective staff surpluses, budget reductions, students inadequately prepared for work and further education, and declining rates of institutional productivity. Faculty and administrators debate the question of demographic changes in the student population, priorities in spending, and investment and allocation strategies to obtain maximum mileage out of limited resources. In a 1977 survey of community college presidents conducted by Jack Gernhardt and Sady Drake of the American Association of Community and Junior Colleges, almost half of the responding executive said that they were concerned about financing as an issue facing their institutions. Indeed, financial concerns, such as the size of the budget and whether it is a "growth" or a "no-growth" budget, have now become a major issue—one that threatens to overshadow traditional concerns with the quality and comprehensiveness of the educational program.

Both of these perceptions—that of the 1960s and that of 1978—involve concerns about the philosophy and mission of the community college. Should it attempt to become "all things to all people," as in the growth years of the 1960s, or should it concentrate on doing well things that it does best and avoid getting into areas not central to its mission? Although there are no easy answers to this ques-

tion, clearly the two-year colleges must somehow reorder their priorities if they are to survive the challenge of reduction.

"Reduction" is a process whereby two-year colleges lose resources from the income side of the budget, producing a condition of financial instability. Most often reduction is realized as a shortfall in the operating budget caused by a number of factors working singly or in combination:

1. The general condition of the economy and the sharp cut-back in federal and state funds for higher education.

2. The decline in the traditional college-age population and funding formulas that limit or prohibit support for nontraditional students.

3. The trend toward government financing of higher education through students and the enrollment plateaus that result when students enroll in other types of institutions because they think the cost benefits of attendance are greater.

4. The problems two-year colleges face in competing against other public institutions for scarce resources because of organizational constraints such as a weak or ineffective lobby, a transient student population, alumni who are inaccessible or uninterested in institutional affairs, political contacts that are limited to the local community, and funding policies that tie the college too stringently to local tax support.

5. The changing job market and the loss of public confidence in higher education as an iron-clad guarantee of a job.

6. The impact of proprietary schools and four-year colleges competing against community colleges for the same students.

7. The resistance of the general public to committing new or unused resources to higher education.

8. The declining motivation of college-age youth for post-secondary education because of the slackening job market and the availability of career-training programs outside of higher education.

9. The effects of inflation, particularly rising energy costs, on the operating budgets of two-year colleges.

10. The movement toward collective bargaining by many two-year colleges and the resulting inflexibility in institutional budgets produced by fixed personnel costs.

Reduction clearly is a complex issue. It is the expression of a deep-felt need for moderation in expenditure of public funds and for growth only when economic conditions dictate and when hard evi-

dence is available that increasing sums laid out for public services are justified by reliable estimates of outcomes. Those who make decisions on two-year-college finances are demanding that institutions identify and measure the outcomes or products or effects of education and compare the results with the costs. This demand is fundamental to the concept of reduction because it mandates that two-year colleges plan carefully the expenditure of resources and more effectively utilize the resources they have available.

Facing a demand of this type, institutions can respond in one of two ways. They can *act* by organizing an aggressive public relations program and lobbying for increased resources to maintain or increase the number of programs and services (expansion), or they can *react* by setting priorities for expenditures and by eliminating expenditures that rank low on the priority list (contraction). The pursuit of growth rewards creative opportunism. It requires that administrators seize the initiative with funding sources and show why their institutions deserve additional funding; and it must, of necessity, be predicated on accurate information showing the costs and outcomes of programs. Contraction, on the other hand, requires toughness and self-discipline. The management of decline, or what in this issue is called reduction, is a different and more exacting task than creative leadership in a period of expansion. It demands different managerial skills and a different approach to administration than two-year college administrators have used in the past.

In the articles that follow, nine knowledgeable contributors examine the issue of reduction in a period of decelerating growth, each from a unique perspective. The first three essays by Martorana, McGuire, and Henderson concentrate on the shifting patterns of community college finance and the responses of states and public systems to such changes. S. Martorana describes how public two-year institutions have become increasingly dependent on state and federal agencies for financial support—a condition that results in increasing state and federal control over institutional policies, programs, and enrollments. W. Gary McGuire examines the patterns of state support for public two-year colleges in thirty-nine states. Although only a few states in his study actually declined in appropriations to community colleges, with a majority reporting a condition of “stabilized” funding, he concludes that “the ‘stabilized’ condition is not far removed from the ‘declining resources’ condition.” Finally, Lee G. Henderson describes the burgeoning role of state agencies in a period of declining

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resources. The state agency, in his view, must create a climate for community colleges to respond effectively and appropriately to changing public policies and needs.

The next three articles consider the responses of individual colleges to declining resources. Herbert M. Sussman presents two models for retrenchment, describing the changes made in staff, programs, and services at New York City Community College, in response to an 18 percent cut in the operating budget in a period of eighteen months. Richard DeCosmo considers the same problem but focuses on the effects of reduction in the area of curriculum and instruction. He suggests that innovative programs and teaching strategies are the first to feel the effects of a budget cut and that programs requiring heavy equipment outlays will rapidly diminish in quality as equipment needs go unmet. Jane E. Matson outlines the effects of reduction on student personnel services. Specifically, she notes that the role of such services is poorly defined at many colleges and that, as a result, faculty and administrative support for this area declines in periods of fiscal uncertainty. She concludes, however, that these services can be reorganized in such a way that the functions they perform will be better understood by groups in the college community.

The responses of faculty and administrators to declining resources cannot but influence the long-range development of a college, particularly the programs and services it offers in response to community needs. The next two articles address this general issue. James L. Wattenbarger discusses two approaches to planning that can be adapted to cope with a reduction in resources. Reinforcing a popular impression, he indicates that community colleges are most successful in carrying out their mission if their activities are the result of a planned institutional program of action. In his view, institutions that follow a reactive approach to planning—moving from one crisis to another without adequately addressing the long-range effects of any actions—may ultimately have to relinquish control over their operations to persons and groups outside the organization. Richard C. Richardson examines the types of problems that community college administrators will face in the decade ahead and concludes that careful research and planning can help institutions maintain or increase their effectiveness even when resources no longer permit growth.

The next two essays look at some heretical concepts that community colleges must consider if they are to maintain the tempo of growth that characterized their early years. Dorothy M. Knoell suggests that two-year colleges should consider the type of institution

they would like to become in the next decade and then to plan accordingly. Specifically, she urges them to undertake new cooperative ventures with other agencies and institutions that offer postsecondary education and to provide expanded opportunities for recurrent education. I then pull together the various threads that relate to "reduced resources" and discuss concepts that are critical to community college finance. Finally, Andrew Hill reviews other sources of information for use in coping with these problems.

If the current furor over reduced resources is troublesome, that is because, in the final analysis, this furor strikes to the question of whether or not two-year colleges are organized to allocate and use public resources effectively in their programs, services, and activities. What is at stake is the mission and goals of the college and its reorganization to accomplish these goals effectively with fewer resources. That, of course, is a task for management. No manuals of "effectiveness" are available, and measurement in this area is a difficult and time-consuming process. Whether two-year colleges will be able to improve their performance and use their resources more effectively will depend in large measure on the ability of executives to supply what money cannot supply—judgment.

Richard L. Alfred
Issue Editor

There appears to be less agreement about the sources of community college financing than there was two or three decades ago. Without new departures in sound directions, the wayward drift to state and federal dominance will continue.

shifting patterns of financial support

s. v. martorana

The question of how best to finance community colleges is as old as the community college movement itself. It has been debated in the legislatures of states throughout the country and has attracted the attention of scholar analysts for over a half century. A statement from a pioneer scholar in the field can serve as a baseline for the discussion to follow: "Logic seems to point toward providing junior college education which is essentially secondary in character [and] free of tuition to the student and this . . . argues for state aid to the community, maintaining the junior college. The policy of generous state encouragement, carrying with it the inference of a state system of junior college units, should be carried out with as high a degree of economy and efficiency to the state and its youth as possible" (Kops, 1924; p. 624). Reflected in that statement are a number of the issues that arise whenever community college finances are discussed. A full development of these issues is beyond the scope of this presentation, but brief discussion of some of the major ones

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is necessary for a meaningful analysis of the shifting patterns of community college fiscal support.

One major issue concerns the relationship between modes of finance of community colleges and modes of control over their policies and operations. Conventional wisdom in American higher education has steadfastly clung to the ideal that control of academic policies and operations should not necessarily be tied completely to the sources that provide funds to establish and operate colleges and universities. As a consequence, only educational policy of the very broadest kind is promulgated by state legislatures and the federal congress. Other authorities, chiefly boards of lay citizens at the local and state levels, control the policies and missions of educational institutions in the United States. Germane to the discussion, however, are such questions as the following: Is this pattern—the separation of control and financial support—changing? Does the broader body politic continue to support such separation? Will the sources of support inevitably also control academic decisions? If so, what will be the consequences for higher education? Awareness of these questions, and the various positions that have been taken to address them, cannot but influence the way in which community college finance patterns have shifted and no doubt will continue to shift as the quest for more effective financing goes on.

A second issue involves the relationship between finance modes and educational philosophy and purpose. An axiom of sound educational finance is that fiscal policy should be consistent with and enhance educational policy. For that axiom to apply to community colleges, the purpose and philosophy of these institutions must be clearly defined and the definition must be accepted in the colleges and in the constituencies they serve. This degree of consensus has not always been present. For example, were the community colleges intended to function as an "upward extension" of the secondary schools or as expanded-entry units to higher education? Should they be local, regional, or statewide in the services they offer; open door or selective in admissions; and low or high cost in the charges they impose on students? Such questions are still being debated. Efforts to resolve them in one direction or another will bear directly on the patterns of fiscal support for the colleges concerned.

A third major issue involves the relationship between community college finance modes and those used to finance other types of institutions. For historical as well as educational and political reasons, secondary education is administered and financed separately and differently from postsecondary education. To the extent that community college education cuts across both levels (in historical development, in sense of

purpose and identity, and in organizational and fiscal arrangements), it is influenced by the differing currents for change that affect each of them. Administrative and fiscal structures that tie community colleges to lower school systems continue in many states, even though these arrangements may now be anachronisms. In other states community colleges have been successful in developing a clear linkage with higher education, and this has resulted in fiscal practices that run to the best interests of the community colleges and their comprehensive commitment to serve the local community. Efforts to move in either direction or toward a separate identity by two-year colleges will provoke shifts in their patterns of support.

Finally, there is the time lag between the first evidence of need for change in fiscal support and the development of new arrangements to meet new conditions. Efforts to make changes in state laws governing community college finance often come before legislative bodies time and again before they are finally enacted. The effect is to encourage change in fiscal support patterns in those areas which are least affected by lag; in other words, the most flexible aspects of the financing formula. The emphasis is on expediency and opportunism in such circumstances, usually with a lasting impact on the fiscal support pattern of community colleges, but rarely with a beneficial impact on institutions or their educational effectiveness.

The following sections build on this brief review of some of the broad issues to be kept in mind in any discussion of shifting patterns of community college finance.

finance patterns

The methods used to finance community college courses today in several states are considerably different from those followed in earlier years. In the early 1920s, when Koos (1924) made his baseline study, 137 of the 207 junior colleges then in existence were private institutions. Of the remaining 70 institutions, 46 were public, operating in affiliation with local school systems. The financing of those junior colleges, therefore, reflected the practices of private undergraduate colleges (in the case of the private junior colleges) and the local public schools (in the case of the majority of the public junior colleges).

In the years that have passed since Koos's study, examinations of junior and community college finances have consistently shown five major sources of income for two-year-college operations and two for financing of capital costs. The main sources of support for the operating

budgets of public community colleges are student tuition and fees, local tax funds, state tax funds, federal grants, and private gifts and grants. For capital costs the main sources of support are local and state tax appropriations. Private institutions rely chiefly on revenues from tuition and fees for operating support and on private gifts and grants and self-liquidating revenue bonds amortized by student tuition charges for capital costs.

Of particular interest is the direction in which community colleges are moving in relation to each of the main sources of support for their operations. A review of available studies reveals that the percentage of operating costs borne by state sources had moved, from an average of slightly over a third, across the nation, in 1955-56 to 54 percent in 1967-68; during that time the percentage borne by the student increased at a much lower rate, from 20 to 22 percent. The percentage carried by local tax sources decreased considerably, from 37 to 20 percent on the average nationwide. On the basis of these data, the conclusion was drawn "that state governments are moving toward the position of providing more of the funds for community colleges than local governments, while the student's proportionate share is changing only slightly" (Martorana, 1971, p. 22). This conclusion was supported also in a separate survey of forty-two states by Arney in 1968. In his study the following median percentages of support for community colleges were reported by several states: 20 percent from student tuition and fees, 21 percent from local tax sources, 52 percent from state aid, 5 percent from federal support, and the remaining percent from other sources (Arney, 1969).

More recently, Wattenbarger and his colleagues have conducted nationwide surveys of practices in financing community colleges in several states (Wattenbarger and Cage, 1974; Wattenbarger and Starnes, 1976). The 1976 report itemizes dollar amounts received in 1975-76 by community colleges from each of the major sources of income already mentioned. It covers the community college systems in thirty-four states and a total of thirty-five systems (Colorado reported two types). If the dollar amounts reported are converted to percentages of total income received and median percentages are calculated for the total number of systems, the results show the following percentage distributions for each source of support:

Student fees: range, 0 to 33.3%; median, 17.9%

Local tax: range, 0 to 54.9%; median, less than 1%

State aid: range, 25.9% to 97.2%; median, 57.8%

Federal funds: range, 0 to 18.8%; median, 5.1%

Gifts and other sources: range, 0 to 16.7%; median, 3.1%

The striking fact here is not merely that the state has become predominant in providing support for community colleges but that in a growing number of cases local tax support is disappearing; sixteen of thirty-five systems surveyed in 1975-76 reported no revenues from local sources.

Another view of the shifting patterns of support for community colleges is provided in the periodic compilations of financial statistics on higher education by the National Center for Educational Statistics, U.S. Department of Health, Education and Welfare. The center provides a statistical reporting service that, with modifications over the years, dates back to 1937. From data compiled in these federal government surveys, Martorana and Morrison (1962) calculated the mean percentage distribution of financial support for community college operations nationwide in 1955-56. The distribution was as follows:

Student fees: 13.8%
 Federal funds: 1.1%
 State aid: 34.2%
 Local taxes: 36.6%
 Tuition transfers (between taxing districts): 6.1%
 Private gifts and grants: 0.8%
 College-organized activities: 0.9%
 Auxiliary enterprises: 5.7%
 Other: 0.8%

Thus, as recently as twenty years ago the localities served were the predominant source of operating revenue, providing nearly half (42.7 percent) of the funding for two-year colleges.

Table 1 presents finance data from 1973-74, the latest year available as this paper was prepared. Two striking findings emerge from the figures. First of all, community and junior colleges have essentially remained true to their commitment to keep the costs of postsecondary education as low as possible. Second, the states, and to a notable extent the federal government, are taking over the burden of costs. The states are doing so by increasing support to their colleges on a *direct* basis through institutional support and *indirectly* through student financial aid. The federal government is essentially following the latter course of action. The percentage of income derived from student tuition and fees was not substantially different in 1973-74 from what it was in 1955-56. For public and private two-year colleges *together*, it has held at a constant 16.1 percent—thereby reinforcing the argument that state governments and the federal government are contributing proportionately more to the financing of community colleges.

When public community colleges are considered in isolation, the state once again is shown to be the predominant source of fiscal support,

Table 1. Current Fund Revenues
(in thousands) in Two-Year Colleges, 1973-74

Revenue Type	Public		Private	
	\$	%	\$	%
Total	3,810,314	100.0	293,253	100.0
Education and General	3,469,718	91.0	219,957	75.0
Tuition/fees	507,212	13.3	153,530	52.4
Federal government	149,319	3.9	5,096	1.7
State	1,629,801	42.8	3,557	1.2
Local	952,727	25.0	1,726	.6
Endowment	3,457	.1*	4,804	1.6
Private gifts	3,488	.1*	35,002	11.9
Other	223,714	5.9	16,242	5.5
Student Aid Grants	111,182	2.9	14,789	5.0
Federal government	76,101	2.0	7,392	2.5
State	21,658	.6	4,094	1.4
Local	2,722	.1*	17	—
Private gifts	8,149	—*	1,885	.6
Endowment	364	—*	411	.1
Other	2,188	.1*	990	.3
Major Service Programs	7,808	.2	299	—
Auxiliary Enterprises	221,606	5.2	58,208	20.0

*Amounts rounding out to less than .1 are not shown.

SOURCE. Computed from data reported in Paul F. Mertins and Norman J. Brandt, *Financial Statistics of Institutions of Higher Education. Current Fund Revenues and Expenditures, 1973-4. Summary Data* (Washington, D.C.: National Center for Educational Statistics, Department of Health, Education and Welfare, 1976), pp. 8-9.

providing 42.8 percent of the total operating revenues for these institutions. Local communities show the greatest decline as a revenue source, providing 25 percent of the operating funds in 1973-74, down from a figure of 42.7 percent twenty years ago.

The use of student aid grants as a means of providing operating funds for both public and private two-year colleges is reflected in Table 1. This practice is now of such a magnitude that it merits special consideration in this analysis. Currently, almost 3 percent of all operating income of public two-year colleges and 5 percent for private institutions derive from student aid grants. These figures place two-year colleges within one percentage point of general federal aid for public colleges and represent three times the proportion of general federal support for

private colleges. But even more significant are the relative roles of local, state, and federal governments and private donors. The federal government is by far the chief source of student aid funds for public and private two-year colleges. It outstrips the state in aid to students attending public institutions by some 3 to 1 and to students attending private institutions by 2 to 1. Local sources of support show up only slightly in the fiscal support patterns of public colleges, as do private sources in private colleges.

These data indicate that the "tuition transfers" between local districts maintaining community colleges in states such as California and Illinois have taken a new form. The transfer of support burden is not between jurisdictions at the same level of relationship with the colleges (that is, supporting districts within a state) but between different levels of jurisdiction—local, state, and federal. The burden in this transfer is being assumed by the state and the federal government. Furthermore, the channel for the transfer is through the student, not the institution.

legislative policy and shifting patterns

The shifts in sources of support for community colleges are not the result of happenstance. They reflect changing public policy positions taken on the broad question of support for higher education, and they parallel trends in legislation at the local, state, and (more recently) federal levels. In retrospect, it is possible to trace the changing scene of public policy and its impact on community colleges in several states. These changes may be characterized as (1) the drive to achieve a balance between local and state recognition, (2) the upset of this balance in favor of the state, and (3) the drive (still current) to involve the federal government in the support pattern.

An excellent illustration of the first stage (the drive to achieve balance) is seen in the first general enabling act for community colleges, passed in New York State in 1948. This law called for an evenly divided support pattern: one third from student fees, one third from local tax sources, and one third from the state. This same pattern appeared in the statutes later enacted for community colleges in Pennsylvania and New Jersey and in the revision of the basic community college statutes of Maryland and a number of other states. By the end of the 1950s, in most states, the state had become a full-fledged and equal partner to the local community in financing community colleges.

The balance between local and state participation in community college finance proved to be a delicate one when viewed from a national

perspective. It lasted about two decades. The pattern in New York can again be used to illustrate the forces that acted to change public policy. Formulas provided in New York's community college laws—calling for equal, or nearly equal, shares of local and state support for these institutions—proved to be inflexible and incapable of responding to rapidly changing conditions for postsecondary education. Most statutes provided for the state to match local support once the enrollment of students in the locally sponsored institutions had been tabulated. Two factors limited the viability of this approach. First of all, in times of financial stress at the state level, state government support for enrollment-driven formulas would soften, and alternate formulas would be sought to reduce state support. Second, since enrollment-driven finance formulas gave control over educational policy formulation to local boards, the priorities of state policymakers often were not evident in programs developed at the local level. Moreover, when congruence in state and local priorities did occur, credit was given to the local board of control rather than to those responsible at the state level—a difficult political position for state-level policymakers to accept. As a result, state formulas for support of community colleges were modified. Specifically, a ceiling was placed on the burden that the state would bear without concomitant support at the local level. For example, the “equal opportunity” statute passed in 1970 in New York prompted local supporting jurisdictions to limit their tax support to that matched by the state in the basic formula. A characteristic local response, this action permitted the state to assume a progressively larger proportionate fiscal burden and led to a stronger emphasis on state-level priorities in educational programming.

Continuing observation of state legislation reveals not only a rising trend toward state control, in line with increasing support, but also a tight-fisted stance on the part of many states; consequently, new resource acquisition strategies are now needed at both the state and the institutional levels (Martorana and McGuire, 1976a, 1976b; Martorana and Nespoli, 1977a, 1977b). These new strategies, whatever they may be, will need to take into account the burgeoning role of the federal government. This expectation is made clear in the figures presented earlier, showing the expanding number of federal programs on which the community colleges may draw and the growing recognition of community colleges that greater participation is both necessary and desirable.

Beginning with the National Defense Education Act of 1958, the federal Congress generated a spate of new enactments that affected community colleges. Of particular importance are the Vocational Educa-

tion Act of 1963 and the amendments to it in 1965, 1968, and 1972; the Higher Education Facilities Act of 1963; the Higher Education Act of 1965; the Education Professions Development Act of 1967; and the 1968, 1972, and 1976 amendments to the Higher Education Act. The drive of community colleges to gain adequate recognition in these federal enactments and to be given equitable treatment in the allocation of federal funds is a story of organizational action that brought wide public attention to these institutions and their local and national leadership. Various aspects of the story are reported in several sources (Blocker, Bender, and Martorana, 1975; Martorana and Sturtz, 1973), and the story is still unfolding.

To date, however, the community college continues to fare poorly in the allocation of federal funds to different types of postsecondary education institutions. This is true even though mandatory set-asides for two-year institutions were written into laws such as the Higher Education Facilities Act, the Education Professions Development Act, and the 1968 and 1972 amendments to the Higher Education Act. An excellent illustration of the underrepresentation of community colleges in the distribution of federal funds is found in a recent report of the College Entrance Examination Board, which showed that community college students use federal student aid programs less frequently than their needs would warrant (Gladieux, 1975).

Public policy concerning the finance and control of postsecondary education generally, and community colleges in particular, is still in a process of change at both the state and national levels. The direction that broad public policy takes will determine the future direction that community college finance patterns will follow.

field behavior: cause or effect of shifting patterns

Community college leaders, like those in other types of public institutions, are highly sensitive to changes in the political milieu. To be successful, these leaders must anticipate changes in the patterns of support for their colleges. When one or more constituencies seem unlikely to contribute their normal share, efforts are made to secure larger amounts from other sources to offset the difference. In this way, shifting patterns of community college finance are to some degree a product of the behavior of community college leaders. The shift from local tax funds and relatively low levels of student tuition to higher levels of state support and direct student charges (offset by financial assistance to students), stimulates statements of leaders seeking new sources of financial support for their institutions.

New finance strategies may be in the offing. As part of the preparation of this manuscript, an inquiry was addressed to members of the National Council of State Directors of Community and Junior Colleges and to the chief executives of institutions holding membership in the American Association of Community and Junior Colleges. These individuals were asked to predict whether, in five years' time, (a) financial support for community colleges will rise, decline, or remain about the same; and (b) new strategies will be developed to cope with future changes in fiscal support. Responses came from sixteen state directors and sixty-eight chief executives. Although these respondents do not constitute a large representation of either group nationwide, their replies can be helpful in the analysis of future trends. The consensus among the respondents was that financial resources for community colleges will at best remain steady. Many indicated an expected decline or a steady state. Only two state directors, one private junior college president, and three public community college presidents indicated an expected increase in level of support in the next five years.

All respondents indicated that some strategic actions in response to the likelihood of declining support were under consideration. Among the state directors, four basic measures were reported: (1) more effective administrative management of fiscal affairs at the institutional level; (2) economizing measures in instruction and programming practices in institutions, (3) stronger public information and lobbying efforts, and (4) increases in student tuition and fees. Private junior college presidents reported heightened efforts in long-range planning and the development of cost-saving programs. Public community college presidents indicated greater emphasis on (1) economizing measures in instruction and programming practices, (2) more effective administrative management of financial resources, (3) programs of information sharing and public relations (including lobbying efforts), and (4) direct efforts to increase resources through increased local and state taxes, tuition increases, and private gifts and grants.

Most of the actions reported in these broad categories are the standard moves of an organization facing tough budget decisions. Some specific examples:

Administrative control and management: Adoption of continuous cost analysis measures, management by objectives, and maintenance of expenditure controls.

Instruction and staffing: Increases in class size, assessment and deletion of uneconomical programs, coupling of classes over longer time periods, and encouragement of multifield teaching.

Public relations: Direct lobbying effects on local, state, and federal levels and a reemphasis on the community orientation of the college.

continuing probes for insight and explanation

Early identification of the fiscal difficulties of community colleges came from Lombardi in 1973. He claimed that both external factors and internal practices contributed to the then-emerging problems. An analysis by Bender (1977) of the growing impact of federal administrative regulations on college operations, and their implications for rising costs, is significant in light of the expected increase in federal participation in community college financing. Weathersby and Jacobs (1977), in an examination of trends in institutional goals and student costs, conclude that the trend toward financing through students may lead to the creation of separate functional services (testing, instruction, certification, counseling), to be paid for directly by the student-clients involved; as a result, institutions may become fragmented. Wattenberger and Cage (1974) advance a thesis in support of state-level planning and state-level fiscal support for community colleges. Designed to preserve local institutional autonomy, this approach would somewhat alleviate the problems posed by current finance patterns for the development of comprehensive community colleges. Garms (1977) looks at the issue of economic equity in terms of both supporting constituencies and students. In a forthcoming publication, Martorana and Wattenberger discuss their design for evaluating state patterns for financing community colleges against criteria developed from the generally accepted goals of these institutions. Finally, as this manuscript was being produced, the Ford Foundation announced a major new grant to the Brookings Institution to support an in-depth economic analysis of community colleges—their services, costs, and productivity.

There is little consensus evident in the conclusions drawn from the growing list of studies touching directly or indirectly on the question of community college financing. Indeed, there appears to be less agreement than there was two or three decades ago. The stage is set for new departures in the finance of community colleges.

conclusion

One strategy for coping with declining resources has been advocated by Gleazer during the last five years and was recently adopted by the American Association of Community and Junior Colleges as official

policy. That is, community colleges should become committed to the concept of "community-based, performance-oriented" education and should become instruments for the development of communities and individuals. This position represents a return of the community colleges to the philosophy of localism that characterized their development in an earlier day. Such a move will not be without problems, as evidenced by two basic questions posed by Gleazer (1974): (1) What are the criteria for success? How do we measure output and summarize it for fiscal, legal, and managerial purposes? (2) If we are to become something different, how accommodating is the current public policy climate in which we operate?

To date, acceptable answers to these questions have not been forthcoming. Moreover, until the concept of "community-based, performance-oriented" education and its place in the American post-secondary educational scene is better defined, interpreted to the public, and accepted by the broader educational enterprise, institutional and public policies favorable to the notion are not likely to take shape. The wayward drift toward shifting patterns of fiscal support will continue. It is hoped that this forecast of future events will not hold and that community college leaders might together launch a purposeful drive toward sound fiscal support for community colleges, founded on a sharply defined statement of purpose to guide community college development in the critical years ahead.

References

- Arney, L. H. *A Comparison of Patterns of Financial Support with Selected Criteria in Community Junior Colleges*. Unpublished doctoral dissertation, University of Florida, 1969.
- Bender, L. W. *Federal Regulation and Higher Education*. ERIC/Higher Education Research Report No. 1. Washington, D.C.: American Association for Higher Education, 1977.
- Blocker, C. E., Bender, L. W., and Martorana, S. V. *The Political Terrain of American Postsecondary Education*. Fort Lauderdale, Fla.: Nova University Press, 1975.
- Garms, W. I. *Financing Community Colleges*. New York: Teachers College Press, Columbia University, 1977.
- Gladieux, L. *Distribution of Federal Student Assistance: The Enigma of the Two-Year College*. Washington, D.C.: College Entrance Examination Board, 1975.
- Gleazer, E. J., Jr. "Beyond the Open Door: The Open College." *Community and Junior College Journal*, 1974, 45 (1), 6-12.
- Koos, L. V. *The Junior College*. Vol. 2: *Research Publications of the University of Minnesota*. Education Series, No. 5. Minneapolis: University of Minnesota, 1924.
- Lombardi, J. *Managing Finances in Community Colleges*. San Francisco. Jossey-Bass, 1973.

- Martorana, S. V. "Finance, Higher Education: Community and Junior Colleges." In *Encyclopedia of Education*. Vol. 4. New York: Macmillan and Free Press, 1971.
- Martorana, S. V., and McGuire, W. G. *State Legislation Relating to Community and Junior Colleges, 1973-75*. University Park: Center for the Study of Higher Education, Pennsylvania State University, 1976a.
- Martorana, S. V., and McGuire, W. G. "Survey Confirms Trend Toward State Control." *Community and Junior College Journal*, 1976b, 47 (1), 8-9, 16-17.
- Martorana, S. V., and Morrison, D. G. *State Formulas for the Support of Public Two-Year Colleges*. Washington, D.C.: U.S. Government Printing Office, 1962.
- Martorana, S. V., and Nespoli, L. A. *State Legislation Relating to Community and Junior Colleges, 1976*. University Park: Center for the Study of Higher Education, Pennsylvania State University, 1977a.
- Martorana, S. V. and Nespoli, L. A. "Decline in Funding Demands Collective Action," *Community and Junior College Journal*, 1977b, 48 (1), 15-17.
- Martorana, S. V., and Sturtz, A. J. "The Higher Education Amendments of 1972." *Community College Review*, 1973, 1 (2), 4-17.
- Martorana, S. V., and Wattenbarger, J. L. *Principles, Practices, Alternatives in State Methods of Financing Community Colleges and an Approach to Their Education. With Pennsylvania a Case State*. University Park: Center for the Study of Higher Education, Pennsylvania State University, in press.
- Mertins, P. F., and Brandt, N. J. *Financial Statistics of Institutions of Higher Education. Current Fund Revenues and Expenditures, 1973-4. Summary Data*. Washington, D.C.: National Center for Educational Statistics, Department of Health, Education and Welfare, 1976.
- Wattenbarger, J. L., and Cage, B. N. *More Money for More Opportunity Financial Support of Community College Systems*. San Francisco: Jossey-Bass, 1974.
- Wattenbarger, J. L., and Starnes, P. M. *Financial Support Patterns for Community Colleges, 1976*. Gainesville: Institute of Higher Education, University of Florida, 1976.
- Weathersby, G. B., and Jacobs, F. *Institutional Goals and Student Costs*. ERIC/Higher Education Research Report No 2. Washington, D.C.: American Association for Higher Education, 1977.

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Results from a 39-state survey indicate stabilization of financing in a majority of these states rather than continued reduction, but major problems continue to confront college administrators.

emerging trends in state support

w. gary mcguire

Increased competition with other sectors of postsecondary education and decreased state revenues are some of the reasons given by state community and junior college directors when, in response to a national survey conducted in 1977, they noted a decrease in financial support. The study was conducted through a questionnaire and follow-up procedure with all state directors included in the 1976 membership list of the National Council of Directors of Community and Junior Colleges. It was designed to elicit data in response to the following questions: What have been the state appropriations for two-year-college operating expenses for each of the last three years? Have these resources been stabilized, reduced, or increased? What critical variables led to this condition? If budgets have been curtailed, generally what have two-year colleges done to respond to financial limitations?

declining resources

For the purposes of this study, we defined "declining resources" as a consistent decrease in funds made available for college operations

over the three-year period 1975-1977. Only seven* of the thirty-nine responding states (including one territory, Puerto Rico) indicated that financial support for two-year colleges was actually decreasing (see Table 1). The remaining states were experiencing either a stabilization or an increase in resources.

In one state, Ohio, the state legislature was faced with either increasing taxes for Ohio residents or keeping increases in state subsidies to a minimum. Since the legislators, for obvious reasons, were reluctant to increase taxes, the only course open was to restrict subsidies for two-year colleges. Although all sectors of postsecondary education in Ohio received modest increases in state subsidies, these increases were not sufficient to meet operating costs. A 3 percent reduction in appropriations was dictated by the governor, and a number of colleges began to consider the possibility of increased student fees to offset dwindling revenues. Coming at a time when enrollments were on the rise, these trends posed a severe problem to the two-year colleges as they labored to serve more students with less money. How did the colleges respond? They hired more part-time faculty, delayed or postponed expenditures for library and educational equipment, and deferred maintenance expenses.

Increased student fees, such as those discussed or instituted in Ohio, are an obvious threat to the open-door admissions policy that has been a hallmark of the community college movement. Another state that may be forced to close its doors to new students is Nevada, where in 1977 the governor recommended a slash of \$22,500,000 in the University of Nevada System's \$188,000,000 annual budget. Historically, the community colleges in Nevada have had to bear the largest percentage cut in resources, in comparison with the two state universities. In addition, because of the biennial legislative session in Nevada, allocations are made for a two-year period. Therefore, budgets established in 1977 tie the community colleges to a single level of operation through 1979. Not only are the dollar amounts more restrictive, but additional line items are continually imposed, so that flexibility within the approved budget is drastically reduced. To meet this challenge, two-year colleges in Nevada have carefully managed scheduling and enrollment of individual classes to maintain the quality and comprehensiveness of existing programs.

Community colleges in Michigan are also experiencing financial austerity and have taken steps to pare down expenses; for instance, they have increased the ratio of part-time faculty, discontinued "leisure-time courses," and reduced full-time staff and equipment purchases to meet the challenge of eroding per student support. Although the absolute

**Table 1. Financial Condition of Community Colleges in
Thirty-Nine States (1975-1977)**

State	Increasing	Decreasing	Stabilized
Alabama	X		
Alaska	X		
Arizona			X
Arkansas			X
California			X
Colorado			X
Connecticut			X
Delaware			X
Florida			X
Georgia	X		
Idaho	X		
Illinois			X
Indiana	X		
Iowa			X
Kentucky			X
Maine			X
Maryland			X
Massachusetts		X	
Michigan		X	
Minnesota			X
Mississippi			X
Missouri			X
Nebraska			X
Nevada		X	
New Jersey	X		
New York			X
North Carolina			X
Ohio		X	
Oregon	X		
Pennsylvania	X		
Rhode Island			X
South Carolina			X
Tennessee	X		
Vermont			X
Virginia			X
West Virginia	X		
Wisconsin		X	
Wyoming	X		
Puerto Rico		X	
	<u>11</u>	<u>7</u>	<u>21</u>

level of appropriations has increased in recent years and did once again in 1977, the specter of unexpected enrollment increases saturated the program base of many colleges and drove expenditures beyond a level capable of being reimbursed by the state. The pattern of rising costs and stabilizing revenues cannot but restrict the enrollments in Michigan two-year colleges to those students they can serve within the limits of existing resources.

A fourth state experiencing a decline in financial support is North Carolina. Operating funds for North Carolina's fifty-seven community colleges are appropriated to the state board of education and are distributed to the colleges on a fair-sharing formula that permits each institution in the system to grow. In 1976 and 1977 North Carolina's colleges were underfunded because of a declining rate of growth in state revenue. Most institutions met this situation by actions such as (1) eliminating selected courses, (2) delaying new programs, (3) transferring administrative positions to instructional positions, (4) increasing the student/teacher ratio, and (5) increasing teacher contact hours. These measures have allowed North Carolina to meet the challenge of reduced income and maintain an open-door policy for its citizens who want to continue their education.

In all of the states categorized as suffering from reduced resources, the actual appropriation for community colleges increased during the current budget year. The rate of increase, however, was smaller than in previous years; was well below the rate of inflation; and, as a result of enrollment increases, culminated in lower per student income. This underfunding has stretched dollars to the breaking point in many institutions and poses serious questions as to their future mission and scope.

stabilized funding

Twenty-one of the thirty-nine state directors responding to the survey indicated that community college financing had reached a "stabilized" condition (see Table 1). That is, there had been no appreciable increase or decrease in financial resources for community colleges in the past three years. Essentially, the "stabilized" condition is not far removed from the "declining resources" condition. With no significant increase in appropriations, states with stabilized resources face the same problems as those with declining resources: increasing enrollments, inflation, rising costs, and other factors that constrict growth. Community colleges in these states are resorting to many of the same actions that are being taken by institutions in states with declining resources.

The twenty-one states whose respondents placed them in the "stable resources" category are Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Illinois, Iowa, Kentucky, Maine, Maryland, Minnesota, Mississippi, Missouri, Nebraska, New York, Rhode Island, South Carolina, Vermont, and Virginia. Most of these "stabilized" states are experiencing multiple problems related to the financial condition of their public two-year colleges. The most frequently mentioned problem is that of declining tax revenue. This condition is, of course, directly related to the general decline in the economy, which has limited funds available to all state agencies, including community colleges. Competition with other sectors of postsecondary education is another problem — mentioned specifically by five state directors. Other problems related to standstill appropriations are declining public support, changing funding priorities to other state services, unexpected enrollment increases in some states and enrollment decreases in others, and an emerging public sentiment against the use of state funds for "self-interest" types of courses.

reactions to declining or stabilized resources

Just as the reasons for nongrowth are many, so are the reactions to such a situation at the state level, the local level, and within the college itself. As shown in Table 2, different methods of dealing with financial austerity, are currently in practice in community colleges in the states with declining or stabilized resources. The most frequently used methods are increasing part-time faculty, reducing noninstructional expenses, and increasing the student/teacher ratio. Less frequently used methods are limiting enrollments, increasing local funds, and allocating resources to lobbying. Some unique reactions include borrowing on tax anticipation warrants, shifting some types of expenditures from state tax funds to tuition funds, sharing staff among institutions, and contracting for student services. Clearly, several of these methods will instigate change in the mission and structure of two-year colleges. The "open door" is threatened. Similarly threatened are the existence of high-cost occupational programs and the ability of the colleges to react to newly discovered educational needs in their communities.

The unique characteristics of postsecondary education in every state make it impossible to generalize the experiences of any one state to other states or to apply cost control methods used in one state to those used in another. It is useful and instructive, however, to describe the conditions and experiences of some states characterized as stable or decreasing in financial resources.

Table 2. Reactions to Decreasing or Stabilized Financial Support

State	Increase Part-time faculty	Reduce Noninstructional expenses	Increase S/T ratio	Limit enrollments	Increase local funds	Eliminate programs	Restrict new-program development	Allocate resources to lobbying
Arizona					X			
Arkansas	X		X			X	X	
California					X			
Colorado		X	X					
Connecticut			X		X			
Delaware		X					X	
Florida				X				
Illinois	X	X	X					
Iowa								
Kentucky	X							
Maine		X						
Maryland					X			
Massachusetts*			X					X
Michigan*	X	X						
Minnesota							X	
Mississippi			X				X	X
Missouri		X						
Nebraska ¹								
Nevada*				X				
New York	X	X	X		X	X		
North Carolina*			X			X		
Ohio*	X	X						X
Rhode Island							X	X
South Carolina	X	X		X		X		
Vermont						X		
Virginia	X	X				X		
Wisconsin*						X		
Puerto Rico ¹					X			
TOTAL	8	10	8	3	4	6	6	4

*These states reported decreasing financial support for community colleges.

¹No information available.

Arizona. The Arizona State Community College System receives funds from the state according to a formula based on full-time-equivalent students. In recent years enrollments have declined, and consequently colleges have lost state aid. The colleges have balanced their budgets by raising local tax levies.

Illinois. Total appropriations for community colleges in Illinois increased steadily until 1976. These increases have not kept pace with the increases in enrollment or costs, nor have they paralleled increased state expenditures for welfare and unemployment compensation. In 1976 the state began to recover from a recession, but the recovery resulted in fewer new enrollments than projected. Since funding is determined through an enrollment-based funding formula, there was a decrease in state aid to community colleges. To combat this situation, many colleges borrowed money through tax anticipation warrants and deferred maintenance and equipment expenditures. Some colleges adopted policies for increasing class size. The most noticeable trend was the dramatic increase in part-time faculty among all two-year colleges in Illinois.

South Carolina. South Carolina's community colleges have been funded at essentially the same level for the past three years. Although a small percentage increment has been made available for expenditures other than salaries, the rate of inflation has exceeded this amount. This condition has been brought about by a general decline in state tax revenues and a feeling that funds for postsecondary education should be limited in order to provide greater funding for elementary and secondary education.

Community college enrollments in South Carolina have declined by about 9 percent over the past three years. This reduction is attributed to a decline in veteran enrollment and the stabilized budget. Some of the state's colleges have compensated for limited funds by using a greater number of part-time faculty; other colleges have had to curtail the use of part-time faculty. Many institutions have been forced to implement large reductions in enrollment to stay within budgetary limitations. Throughout the state's community college system, colleges are giving careful thought to nonreplacement of staff members who leave, but there has been no effort to deliberately cut staff in order to meet budgetary limitations. The presidents of several colleges have organized a consortium to influence the legislature by holding special meetings for their benefit.

Rhode Island. The state appropriations picture for Rhode Island Junior College has shown a pattern of increases over the past three years.

However, the increases requested were to accommodate increased enrollments and the opening of a new campus facility in the northern part of the state. State appropriations for 1974-1977 were as follows:

1974	\$ 8,577,000
1975	\$ 8,995,385
1976	\$12,470,576
1977	\$13,459,758

With the additional funding necessary to operate the new Blackstone Valley Campus, including additional faculty to accommodate approximately 900 more students and to counteract the effects of inflation, the result is a stabilized financial situation for Rhode Island Junior College.

Vermont. The Community College of Vermont is presently the only publicly supported two-year college in the state. The college was founded in 1970 as a private institution without state funding. State funds were first appropriated for the college in 1973, when it became part of the Vermont State College System. The next two years brought increases in the level of appropriations. The pattern in 1976 and 1977 was one of decreasing sums. For fiscal year 1978 a recommendation was made to increase the appropriation, but only to its level in 1976—the first year of the decreasing appropriation. The college responded by trimming programs and reducing staff. The student financial aid office was eliminated, and the college contracted with another institution to provide the service.

New York. The financial condition of community colleges of the State University of New York has deteriorated in recent years but some additional aid has been forthcoming. This has occurred as an incentive to enroll greater numbers of disadvantaged students, to achieve a faculty/student ratio of at least 18.5/1, and to ensure an allocation of 50 percent or more of the institutional budget to instructional costs.

In 1976-77 an attempt was made to reduce state aid by 10 percent for colleges that had accumulated a reserve balance. This move was successfully protested by the colleges; they claimed that such a move would penalize them for instituting cost-saving methods that enabled them to achieve the surplus. Full state funding in 1977 was limited to a statewide total of 116,800 full-time-equivalent students. A 50 percent supplemental appropriation was given for 1,168 full-time students and an additional 25 percent supplement for 1,168 full-time-equivalent students. For each additional FTE student, a payment of \$100 was provided for each institution.

This funding pattern forced several community colleges in the state to delete entire programs, reduce full-time staff, and employ greater numbers of part-time faculty. The situation has been aggravated in some colleges by expensive union contracts, rising costs, and declining enrollments.

increased resources

Not all state systems of community and junior colleges are experiencing decreased or stabilized funding. Eleven states in the survey reported steady increases in state-appropriated funds (see Table 1). The reason underlying the increase appears to be rising tax revenues resulting from increased industrial development and population expansion. It is interesting to note that most of these states are not located in the Southeast, which we have been led to believe is experiencing great strides in industrial growth. The lack of a geographical pattern can be linked to the unique characteristics of the economy in these states, as described below.

Alabama. Alabama's system of community and junior colleges is financed almost entirely from state funds. Tax revenues for a Special Education Trust Fund have grown rapidly in recent years, with the state sales tax the highest revenue producer. The state income tax has also increased rapidly. These taxes are "earmarked" for school and college support.

State appropriations for community colleges have been as follows:

1975	\$28,400,000
1976	29,000,000
1977	34,500,000

Alaska. The two-year colleges in Alaska have experienced considerable growth and expansion in recent years. These colleges derive their funds largely from state-appropriated general funds and, in lesser part, from such sources as program receipts, student fees, and government contracts. The following are resource allocation totals for recent years:

	FY 1975	FY 1976	FY 1977
General funds	\$3,236,900	\$7,589,800	\$12,884,200
Other	2,198,000	2,101,300	4,094,300

The growth of Alaska's community college budget is directly related to that state's burgeoning economic picture as a result of increased oil revenues.

Idaho. Idaho has only two community colleges. Each offers both academic and vocational-technical programs. Academic programs are funded at the state level by general funds and at the local level from locally derived tax revenues. Vocational-technical programs are funded at the state level by means of a general appropriation to the Division of Vocational Education, which then parcels funds out to these programs. State funding (excluding federal funds) has grown both in absolute dollars and in the percentage cut of the total budget. State funds comprised 37 percent of the community college budget in 1973 and 46 percent in 1977.

Enrollments have increased significantly in recent years, thus requiring more funds to maintain existing educational programs. The two-year colleges have a limited tax base and are highly dependent on state revenue. One of the colleges serves five counties, but only one county in its tax district can be depended upon for maintenance and operation and bond redemption tax levies. The other college serves eight counties and portions of two more but has only two counties within its tax district.

Indiana. Indiana has only one publicly supported two-year college, and its appropriation increased from \$2,691,734 in 1975 to \$3,754,378 in 1976, plus a supplemental vocational education appropriation of \$210,000 in 1975 and \$340,000 in 1976. The critical variable in the budget increases has been the law prohibiting the state from going into debt, thereby enforcing cost-saving measures and enhancing its ability to support its public schools and colleges.

Pennsylvania. The state allocation to community colleges in Pennsylvania represents approximately 33 to 38 percent of their annual operating expenses, which in 1976 amounted to nearly \$35,000,000. This is a small percentage of the state allocation for higher education, including appropriations to Pennsylvania State University, the University of Pittsburgh, Temple University, Lincoln University, fourteen state-sponsored colleges, and a number of state-aided universities such as the University of Pennsylvania.

Because of the decline in the state's economy and the resulting reduction in tax revenues, a small across-the-board percentage increase has been instituted as an economy measure. This increase in the state allocation is then divided among the state-supported institutions. The community colleges have fared well in this situation. An unexpected enrollment increase has allowed them to reduce their per student cost; because they have a low per student cost to begin with, they have been favored by the state board of education which has limited enrollment

and budget increases for all sectors of postsecondary education except the community colleges. Moreover, in 1974 the state legislature increased aid to community colleges by providing an additional \$150 per year for each full-time-equivalent student enrolled in vocational-technical programs, which amount to nearly 50 percent of their enrollment. Because of their low per student cost and the fact that they represent a small percentage of the total budget for higher education, community colleges have not experienced budget cuts.

Wyoming. In Wyoming approximately 58 percent of the operating costs for the state's seven community colleges is appropriated by the legislature from the state's general fund. State support has continued to increase as enrollments have swelled beyond the level of each preceding year—largely because of the rapid development of energy resources, particularly coal. A strong lobbying effort on the part of college staff and trustees is also seen as a reason for increased allocations to community colleges in Wyoming.

conclusion

Several factors seem to be contributing to the present financial picture in states whose support for two-year colleges has decreased or stabilized:

1. An unexpected increase in enrollment in the past three years, caused by a large influx of veterans and students enrolling because of lack of employment opportunities; funding often did not increase in proportion, thereby forcing many institutions to operate at austerity levels.
2. A failure on the part of many institutions to anticipate an enrollment decline in 1977-78 as fewer veterans entered college and job opportunities improved.
3. The continued economic decline in some states, resulting in decreased tax revenues.
4. Declining public support for higher education.
5. Increased competition with other segments of postsecondary education and other state agencies and services.

Perhaps the most significant point, however, is that the financial situation—whether declining, stabilized, or increasing—has become to some extent a change agent for community colleges at the state level and at the local level as well. More and more, state community college boards are finding it necessary to keep legislators well informed of the services that two-year colleges are providing. New staffing patterns are develop-

ing, with increased employment of part-time faculty. This in itself can alter the character of the college by adding to the ranks of "traditional" faculty the pragmatic value orientation of those employed full time in an occupation other than teaching. The "open door" is closing and tuition is rising to offset burgeoning expenditures—all of which may lead to selective admissions policies and a resulting change in the nature and characteristics of the community college student. Class size is increasing, which places a burden on faculty and could lead to difficulty in contract negotiations.

These effects are readily visible in many states. There is, however, a less visible and potentially positive outcome of the financial squeeze affecting community colleges. In a letter to the editor of this volume, Joseph Bruno, coordinator for community colleges in the Commonwealth of Pennsylvania, pointed out that a clear-thinking administration will always find a solution to budget problems—a solution that will have the minimum negative impact on the services offered by the institution. Admittedly, a stable or reduced budget will change the operation and direction of a college, but this effect should result in new commitments to the community, while at the same time reducing the unit cost of college operations. Many changes will take place, but these changes should serve to enhance the community colleges as community-based institutions.

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State agencies for community colleges can assist campus efforts in responding to changing local, state, and national needs, while resisting greater bureaucratization that would stifle responsiveness.

state agencies and effects of reduction

lee g. henderson

"Blessed is he who administers in a period of growth. Persecuted is he who administers in a period of no growth. But damned is he who must administer during the transition period from growth to no growth." Thus Kenneth Ashworth (1977), commissioner of the Texas Coordinating Board, describes the plight of state agencies in today's environment for education—an environment where declining birthrates have resulted in a substantial decrease in the rate of increase, and sometimes actual decreases, in community college enrollments; where society is in a period of transition from growth to stability or even contraction; where taxpayers are showing increased resistance to new or additional taxes at all levels. Higher education has lost a degree of public confidence and therefore finds itself in a poorer competitive position with other social agencies for limited fiscal resources. Our days of operating virtually unquestioned, and of being both autonomous and affluent, may well be a phenomenon of the past.

State agencies increasingly are caught between demands by legislators for change and legitimate demands by faculty and institutional

administrators for what they consider adequate support. Lucille Maurer (1977) of the Maryland House of Delegates has clearly stated the legislative position:

I believe higher education will in time respond to the changing conditions more realistically and more coherently than has been evidenced to date—not because the institutions will change their habits of operation primarily of their own accord; rather, these changes will come as a consequence of statewide planning and coordination and as a result of redesigned public policies reflecting adjustments to the needs of the decade ahead. . . .

After all, we are asking higher education to adjust rapidly to changes of direction, not just a change of pace. We are asking for this change of course at the same time the institutions are coping with the impact of spiraling costs with increased resistance by taxpayers to heavier burdens, with student resistance to increased tuition, and with faculty seeking higher salaries.

Attitudes such as this obviously place additional demands on the state agency and also tend to erode the decision-making authority of local governing boards. These boards are becoming increasingly resistant to state and federal mandates that reduce local latitude in making decisions and add administrative tasks and new priorities to local operations at a substantial cost, but without any provision for the funding of these new directives.

The state community college agency often finds itself in the middle, representing both local and statewide interests. On the one hand, it serves as the advocate of the legitimate concerns of two-year colleges for the funding needed to provide quality programs and to compensate their professional and nonprofessional staffs. Additionally, it works to assure that two-year colleges are given appropriate roles and the operational freedom necessary to fulfill those roles in the statewide educational plan. On the other hand, it must interpret and often enforce the mandates of the legislature and the comprehensive-planning agency to specific institutions in the system. Finally, it serves as a mediator between the institutions and the legislature in an attempt to bring these two increasingly disparate systems into some degree of harmony.

Legislators are becoming concerned not only about comprehensive planning and broad, long-range policy changes but also, as the competition for scarce resources increases, about the use of appropriated funds. That is, they are entering areas that traditionally have

remained under the control of faculty and administrators—areas such as enrollment quotas, course approvals, types of programs to be funded, salary increases, teacher loads and administrative ratios, and fee policies. In addition, they are concerned about accountability and are insisting that colleges document clearly the outcomes of their programs and services. These actions, when viewed together, amount to nothing short of the greater concentration of control at the state level.

In times of strong public support and ample funds, legislators do not generally concern themselves with the operations of our colleges. Conversely, in a period of diminished public support coupled with limited funds, legislators seek even greater accountability on the part of the colleges. This leads to increased expenditures for defending what we are doing and decreased expenditures for getting the job done.

The role of the state agency in this climate is complicated further by the legislature's increasing efforts to become independent of the executive branch. To exert that independence, legislatures are beginning to hire and depend heavily on large staffs, who not only stand between the executive branch and the legislators but also deal directly with individual institutions. These staffs have the time and the intellectual curiosity to probe and analyze policy questions as well as specific operational procedures of community colleges. Legislative staff activities result in substantial demands for information from, by, and about the colleges in a state system and place expanding work loads on the state community college agency and the individual colleges.

institutional responses to reduced resources

As institutions are being asked to adjust to fewer real dollars per student and to stabilizing or even declining enrollments, limited financial resources are being further eroded by snowballing overhead costs, caused by a variety of reporting and procedural mandates issued by governmental agencies at the state and federal levels. Heavy overhead costs, the cost of inflation, and the demand for additional student aid to keep the "open door" open for all citizens are forcing community college administrators to make tough and unpopular decisions, often without the information base needed to make the best decisions. The result in many cases has been a retreat to traditionalism, precisely when there are renewed demands for new approaches whereby educational services can be provided to new and nontraditional student populations.

In recent years one of the major goals of two-year institutions has been to secure salary levels that could keep pace with increases in the

cost of living. Since tax support generally has not kept pace with inflation, this goal could be met only by budget reductions, generally accomplished through increasing staff loads and/or reductions in instructional support. In such a situation the innovative and high-cost programs necessary to fulfill the objectives of the "open door" are the first to feel the pressure. A similar condition exists in the area of funding for program development and high-risk capital.

At the same time, and with good reason, the increasing external pressures on institutions have prompted faculty and administrators to question seriously the new mandates, suggestions, or initiatives from the state level, which require institutional staff and/or monetary resources for accomplishment. Colleges can rearrange priorities just so many times within fixed resources; after a certain point, the delivery of education to students is seriously affected. Many colleges have already reached the breaking point in responding to state and federal initiatives. Nevertheless, demands for change will not disappear. They will be accentuated in the years ahead. The ability of community colleges to respond will be seriously limited by the percentage of the budget that goes into personnel benefits and by the difficulties inherent in changing staffing patterns because of tenure and other legal limitations involving employment in the public sector.

Colleges have responded to this situation by becoming more competitive for existing funds. In a situation where the primary problem is keeping up with growth, it is not too difficult to involve colleges in systemwide decisions related to policy and fund allocation, nor is it difficult to achieve consensus. But as the rate of growth slows and resources decline, institutions become obsessed with their own internal problems, and it becomes increasingly difficult for them to recognize and respond to broader concerns.

state agency responses

Legislative responses to declining resources are requiring states to take new responsibilities in decision making. How does the state agency respond to these pressures? In a climate of this type it is relatively easy to centralize authority in the state agency, especially in states where a substantial percentage of the college budget comes from legislative appropriations. However, as most thoughtful students of educational policy recognize, educational decisions are best made as close as possible to the scene of the action; when there is sound reason for making

decisions at the state or system level, those decisions should be made in such a way as to give maximum latitude to the decision-making authority at the local level.

Discussions with state officials and legislators across the country, and with theorists in college administration, seem to support the position that state agencies must reexamine their operations and give priority to at least four areas outside of their routine administrative functions. These areas might be classified as (1) information and accountability, (2) communication and advocacy, (3) funding, and (4) change agent responsibilities.

Information and Accountability. As any college president will testify, demands for information are skyrocketing. The literature is replete with cries of anguish from institutional administrators about the costs of rapidly increasing reporting requirements from a variety of state and federal agencies, not to mention the growing demand of local governing boards for information. While it is doubtful that any agency or system can stem the tide of such demands for information, the impact can be greatly mitigated if there is a well-developed information system that includes a taxonomy of data elements needed to respond to information requests and management needs. Such a system must provide for the collection of each data element only once; and it must be easily manipulated for aggregation or processing, to provide information needed for a variety of reporting purposes. However, it must not be dominated by the information requirements of state and federal sources. Regardless of the level or type of control, most management decisions are now and will continue to be made at the individual college or campus level. Therefore, information systems should give priority to the information needed to enable management to make good decisions at all levels.

Such a system may be difficult to develop because of the variety of taxonomies used in requesting data. Community colleges, in particular, are caught between the reporting requirements used in the HEGIS (Higher Education General Information Survey) classifications, the state and local school system classifications, and the classifications required by federal and state agencies. Although some progress has been made in reducing differences and disparities among various federal reports, a single taxonomy of information for all of education still has not been developed. One advantage of a single data system is the mediating effect that it can have on data collection from a variety of state interests. With the availability of an operative data system, the state community college agency often can mesh with data requests of other

state interests so that these requests will be based on available information, thus eliminating the need for a separate or duplicative reporting instrument.

With the increasing demand for accountability, the data system must include not only input and process measures but also some common measures of output. This would enable the local governing boards to evaluate their operations and also provide a system of accountability and quality control to the appropriate state executive and legislative bodies responsible for community college education. The net effect would be increased savings through the more efficient use of resources and improved relations between the college and the state legislature.

Communication and Advocacy. Information is not enough. Data must also be communicated and interpreted to decision makers in a way that will result in sound decisions at the college level, the state board level, and the legislative level. In a period when state agencies and institutions are suffering from reduced resources and reductions in funding, better ways of communication must be developed. The state agency needs to communicate effectively to all segments of the local college community—the board, the administration, the faculty, and the students. It also must communicate to the legislature the legitimate needs and expectations of the colleges for support and resources. In addition, it must communicate to the public the needs of the individual institutions in the system in a manner that will give community colleges the highest possible priority in the allocation of limited resources. Only the state agency is in a position to serve as advocate for the needs of the total system and to give attention to systemwide priorities. Without a strong state agency there is real danger of internal fighting and “pork barreling” among the various colleges for limited resources.

Funding. Because funds are in short supply as a variety of new and expanding governmental services draw upon limited tax dollars for support, legislators are seeking alternative approaches to funding. These alternatives include special allocations to private institutions or to students attending private rather than public institutions; joint use of private and public facilities or joint use of different levels of educational facilities; program consolidation within or among institutions; closing or merger of institutions; and failure to create new or additional institutions. None of these alternatives is harmful per se. However, the expanded use of each or all of them does mean reduced funding to community colleges in comparison with the funding they received in the 1950s and early 1960s. Reduced resources, both in money and students,

will require some significant changes in the process by which state funds are generated and allocated to individual colleges.

When enrollments were expanding, community colleges were happy to receive appropriation increases based on average cost per student. Growing institutions fared well under such a formula. When enrollments leveled off or declined, the reality of marginal costs were more clearly recognized. Colleges discovered that formulas based on dollars per FTE student—formulas that were adequate in a growth situation—were entirely inadequate in a static situation. The FTE-based formula, which served so well in a growth situation, became an absolute catastrophe in a period of decline because no institution can reduce expenditures by the total average per student costs.

National agencies such as the National Commission on Financing of Postsecondary Education, the National Center for Higher Education Management Systems, and the National Association of College and University Business Officers have pointed out the need for greater insight into costs and the impact of enrollment changes on costs. State agencies must build on these national models to develop a costing system that describes what costs institutions have borne historically, how institutions respond to enrollment changes, and what the costs ought to be. There is a critical need for costing and allocation formulas that more closely approximate the funding needs of each institution in the state system.

Change Agent Responsibilities. A fourth priority for the state agency, in responding to declining resources, is to provide leadership and assistance to the colleges to help them respond more quickly to changing needs. It is axiomatic that while changes in society create changing educational needs, and while the state legislature may dictate change, change can be effective only when it is undertaken with the concurrence and support of those at the institutional level who are responsible for its implementation.

There is an element of difficulty inherent in this type of reasoning. As indicated earlier, institutions facing a condition of declining resources and rising external demands tend to retreat into traditional practices. Unless the forces for improvement, innovation, and quality—the willingness to take risks—can be kept alive at the institutional level, the real danger is that the response of state agencies will be greater bureaucratization at the state level. Unfortunately, if this occurs, the result is likely to be further policy development in the areas of inputs and process (that is, faculty work loads, administrative/faculty ratios, and

the like), with a consequent reduction in the freedom of individual colleges to utilize resources in ways that provide alternative staffing patterns, alternative ways of providing instruction, and better measures of outputs.

The real challenge to the state agency is to assist colleges in their efforts to further innovation and vitality in responding to changing needs at the state, national and local levels. There must be strong resistance to the tendency toward greater bureaucratization that will stifle the opportunity for creativity at the college level.

references

Ashworth, K. "View from State Higher Education Agency." *Proceedings of the 26th Legislative Work Conference*. Atlanta, Ga.. Southern Regional Education Board, 1977, 7-12.

Maurer, L. "View from the Legislature." *Proceedings of the 26th Legislative Work Conference*. Atlanta, Ga.. Southern Regional Education Board, 1977, 9-12.

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*A case study of severe budget reductions at New York City
Community College may be instructive to college
administrators who have not yet lived through such trauma.*

institutional responses to reduced resources

herbert m. sussman

The cry about the financial crisis in higher education, so loud a few years ago, seems to be changing in volume and intensity. The label *steady state*, if there is such a phenomenon, is now a familiar term in our lexicon. The shock of the economic depression and its impact on higher education has progressed from the acute phase to the chronic phase. Those of us who are unprepared to adapt to reduced resources, either for lack of interest or because the problem is no longer in its acute state, surely will face problems that have been part of an excruciating past for others.

Although community college administrators in different parts of the country face different types of problems related to lack of fiscal support, the conditions of decelerated growth and reduced resources run from coast to coast. From the unobtainable expectation of the 1960s, that education can and will resolve all societal problems, to the current attitude, that education has a limited role in a larger societal context, the fiscal priority of higher education at local, state, and federal levels has been lowered.

Of all public agencies, community colleges are probably most vulnerable to a financial reduction when state and local governments call

for a reexamination of funding priorities. Viewed as institutions designed to serve the needs of the community, two-year colleges rise and fall in relationship to support from the community and the state. In New York City, for example, the specter of financial insolvency forced the city government to reduce funding for all public agencies. The combined budgets of the eight community colleges in the city—collectively identified as part of the City University of New York—received a larger percentage cut than any other city agency, including the public four-year colleges. This cut precipitated a two-week shutdown of the City University in June of 1976 and curtailed fall semester enrollments as students, apprehensive about the stability of educational programs offered in the City University, enrolled elsewhere.

If my experience as a chief executive of an institution that experienced a series of severe budget reductions over a two-year period is the prospect of the future, then a retrospective look at New York City Community College could be instructive to those more fortunate college administrators who have not yet lived through such trauma.

trauma of reduction

The budget crisis at New York City Community College began in the fall of 1974. Each budget reduction that took place changed the character of the institution. While initial cuts trimmed the proverbial fat, later cuts severed programs, services, and enrollments and created an institution with a different look. Although increased efficiency partially ameliorated the trauma, the enormity of changes in class size, course offerings, maintenance and supportive services, and equipment and supplies demanded of administrators a new approach to management. Not the least of their problems was the imposition of tuition for the first time in fall 1976 and dramatic changes in financial aid and student retention policies.

In the fall of 1976 New York City Community College enrolled approximately fourteen thousand regular day and evening students; 80 percent of these students were enrolled in career programs and 20 percent in liberal arts curricula. For many years prior to the fall of 1974, the college had been enrolling students beyond its fully funded target, thereby earning additional work-load money by which to meet the excess enrollment. Work-load funding was always calculated well below actual operating cost. For example, in 1974 the funding for direct instruction per full-time-equivalent student was \$1,141. However, by overenrolling to meet student demand, New York City Community College earned

additional dollars at about half the rate. Since the overhead costs of operating the college had already been met, these additional funds more than covered the cost of part-time faculty hired to teach extra sections. The remaining work-load money was distributed among a variety of college services. Support services were increased and some additional full-time faculty positions were created for departments that began to show an excessive number of part-time hours. This incremental funding pattern provided the flexibility that the college enjoyed before the financial crisis. As a result, faculty and administrators became convinced that almost any emerging institutional need could be at least partially met. There was no penalty for a modest miscalculation of funds or enrollment because there were always unallocated funds that could be used to cover an unanticipated situation. To the extent that past budget increases were incremental, the effect of future reductions became progressively more severe until they eventually cut to the heart of the college.

Threats of budget reduction to the City University by New York City had been an annual activity for a number of years, but cuts had never actually been made. The first actual dollar cut was made for the 1974-75 fiscal year. The university responded to the reduction by requiring an across-the-board percentage cut of 1.597 percent from each college budget. The dollar amount for New York City Community College was \$467,000 out of a total budget of \$27,000,000. To effect this savings, the college cut its supply and equipment budget and did not fill a few vacated positions. In midyear—long after the budget had been distributed among the operational deans—the university informed the college that an additional special savings of \$555,000 would be required. Somewhat like a group of businessmen asked to pledge contributions to the community chest, the council of deans met with the president to decide how to achieve this savings. What was the fair share for each? First of all, they agreed that, where possible, things would be cut before people. Therefore, since the budgets of the dean of students and the dean of continuing education were composed primarily of personnel costs, the cuts at this time principally affected the dean of faculty's equipment and supply budget and the dean of administration's monies for supplies, buildings and grounds, and OTPS (other than personnel services). Although they seemed devastating at the time, in retrospect the 1974-75 reductions were comparatively innocuous.

In the late spring of 1975, the city's fiscal position deteriorated further, and further reductions in the university's budget seemed inevitable. As New York City Community College went into the early

summer, the magnitude of the cuts remained unknown. By August, however, the college's administration learned that the budget cut would be \$2,900,000—or 12 percent of the total college budget. The next few days were among the most difficult ever experienced by the college.

In attempting to develop a "style" for solving this problem, the college's administrators developed a principle that would ensure an ecological balance for reduction within the college. This principle, the "ecological model," differed substantially from the across-the-board cut used earlier; specifically, the new procedure involved more difficult choices. No longer could each activity be considered equal to every other activity. Large sums of resources were needed, and the only way to get them was to cut deeply into selected activities. It soon became apparent, however, that such cutting often limited the activity so drastically that it could no longer function effectively. An example concerned the cultural affairs program, under the direction of the dean of continuing education. The cost of the operation was about \$100,000. The offering of cultural programs to the community was a specific institutional goal; it was of low priority only when compared with the other major goals of the college. The loss of one staff member would reduce the ability of the operation to function, so that the choice was either to eliminate it altogether or leave it in its original state. The program was totally retrenched. In addition, thirteen professionals from the dean of students' area were retrenched, together with eleven other professionals from various administrative offices. One hundred civil service employees were cut from the dean of administration's area. Other items too numerous to mention were also recommended for reduction.

The decision to go through a brief and intense period of budget slashing rather than a drawn-out series of plans did create some difficulties. For instance, there was minimal involvement by faculty. However, the academic program was barely touched; instead, the support services took the brunt of the cuts when the "reduction package" was presented to a meeting of department and division heads for their review. A list of alternatives for possible savings, with dollar amounts, was provided to this group in the event that there would be recommendations to change part of the administration's plan. It was apparent that any one alternative was as disastrous as the other and that a "no-win" situation existed for any division or department. Small modifications suggested by the faculty were made, and staff were retrenched in accordance with policies established by the board of higher education. This sequence of events occurred between August 4, 1975, when New York City Community College received its budget, and September 1. At midyear city officials

demanded an additional \$32,000,000 cut by the university. The presidents of each college insisted that no further cuts could be made. The city then insisted that tuition be imposed; the university resisted. On May 28, 1976, the chancellor called a special meeting of the presidents, and the entire City University closed for lack of funds. Special state legislation was passed, and tuition was imposed for the 1976-77 academic year. All university personnel were forced to take a two-week salary "deferral," after which the colleges reopened.

staff involvement in decision making⁹

Despite the imposition of tuition, the first view of the 1976-77 budget confirmed the worst fears of college staff; it required a \$5,400,000 reduction from the previous year's austerity budget. The "things-before-people" and the "ecological" models were severely tested when the process of reducing the budget began anew. Four major areas were in competition, each represented by a dean: the academic program (dean of faculty), student personnel services (dean of students), community services (dean of continuing education), and nonacademic support services (dean of administration). Tension among the deans was high as conflicting interests were put on the table: "How does one compare counseling services for underprepared students with community service programs for senior citizens, and compare both together with the need for college-wide security services in an urban setting?" "The main concern of the college is the academic program. Shouldn't programs receive the funds needed and any remaining dollars then be divided among these less important functions?" "Without counseling services, isn't the open-admissions program a deception?" "We've spent years building up services to the bypassed constituencies—the aged, the disabled, the ex-offender, the unemployed. Must we give them up now?" "There are almost no funds for equipment at this time. By severely cutting security, we're going to increase our losses with no replacement possible."

The resolution of these conflicting pressures could please no one. The best preparation for what was becoming an annual process of reduction consisted in part of having more data available. Each dean was asked to provide impact statements on the effects of 10 and 20 percent reductions from the previous year's allocations. In addition, each dean met with the business manager to receive assistance in pricing out the costs of service for specific programs. For example, could a position be saved if temporary service costs were reduced? Would personnel assume

extra responsibilities if no substitute service funds were available? There followed a period of trial balances, carried on privately with the business manager and the dean of the college, plus consultation with each dean separately on the impact of a range of reductions. Refined calculations on the income side of the budget, as well as the monetary risks that would be taken, were provided by the business manager. Finally, several meetings with the council of deans were held, with faculty representation by two members of the college-wide personnel and budget committee. At the outset, however, the president stated that there would be a student personnel program and a continuing education program at the college, no matter what the outcome of the budget cuts.

As of this writing, the college still functions well, but the impact of the cuts are now being felt by many departments. For example, the loss of over half of the maintenance staff has resulted in dirty halls, classrooms, and restrooms; requests for repair services by faculty and chairpersons have been delayed or shelved altogether; and funds are not available for replacement of equipment. Supplies are a major problem, and new equipment will require the effort and ingenuity of grantsmanship. The retrenchment of classroom faculty has resulted in fewer course offerings and fewer sections available to students. The reduction in the budget was intended to drive down enrollment—and it succeeded. In two years the college lost approximately 30 percent of its student body. Retrenchment, conducted according to the principle of seniority, not only affected the affirmative action plan of the college but also greatly increased its cost per student. Part-time faculty were retrenched first; then junior faculty. In effect, the lowered budget allocations drove up the unit cost of instruction to an all-time high.

guidelines for change

How does this experience apply to other institutions, particularly those in a developmental phase? What must be done to head off future reductions before they occur? What can a college do to ensure a healthy budget five and ten years into the future? One matter is certain: Almost any cut can be imposed in any institution. Services can be reduced; and the nature of an institution can be changed; there is no acceptable alternative to survival. It is impossible to eliminate pain when substantial reductions are required. The institution must take priority over individuals; positions, not people, must be reviewed. Many, if not all, of those responsible for operating a community college are not prepared psychologically to make cuts when faced with declining resources. This is

a task for which there is little practical experience or training. The creative management of reduction is a different and far more exacting task than creative leadership in a period of expansion.

Public community colleges for the past thirty years have used planning as an attempt toward orderly expansion. Most plans have been addressed to providing "add ons" in facilities, staff, programs, and students for the near and long-term future. However, the process of expansion has a high level of tolerance for miscalculations. The process of reduction leaves little room for error. If we are to reduce the trauma of reductions, we must provide for increased efficiency without the economy of size. Increases in size can be accomplished at less than average unit cost—economies per scale. Reduction can be accomplished only at above-average unit cost, because the operations that remain must absorb and provide the services that have been eliminated.

Those in positions of executive leadership will clearly have to acquire greater management skills. Managerial styles predicated on short-range paternalism and ego gratification will have to be replaced by actions that ensure long-range institutional survival. The impulse to "do the right thing" for faculty and staff in salaries, fringe benefits, and work load will have to be tempered by a long-term view of the most effective distribution of available resources to achieve the goals of the institutions. As the pressures on the college to become an agency for employment rather than an agency for the delivery of educational services grow, executive leaders will need to become increasingly cautious in their allocation of resources.

Expenditures for personnel are on the rise and have come under critical review by the public. The programs that house such personnel should be reviewed and their right to continued existence justified. Criteria for evaluation should be developed that enable the college to rank its programs in order of their significance to the goals of the institution and the community. While costs per credit or weekly student contact hours are important variables, other factors—for instance, the ratio of student applicants to openings, local manpower projections, success in job placement or transfer, student attrition in courses and curricula, average length of time for graduation, age and turnover of faculty, and effect on other programs and courses—are equally important. Priority setting for curricula is a faculty role, but it must be supported by an information-gathering system that is capable of supplying necessary data. The final ranking of curricula is a joint venture of faculty and administrators. It is extremely difficult to decide which curricula should be offered within the parameters of available resources, but such

a decision must be made if institutions are to deal effectively with the phenomenon of reduced resources.

Zero-based budgeting, a technique that is attracting attention in higher education, can be a useful tool for annual validation of programs and resources. The traditional style of budget development, based on the previous year's budget plus additional funds, may be a phenomenon of the past. Any increases in funding are more than offset by increased operating costs. Also, annual salary increases required by negotiated contracts must be viewed as a first lien against anticipated funds. All indications point to increasing union activity as a result of inflation and the shrinking pool of available jobs. Building a budget from a zero base forces scrutiny of every college operation. It reinforces the need to establish priorities for each program as the benefits of each are weighed against its cost. While the budget should be an expression of the program in dollars, it also represents the degree to which the program can be supported within the institution's available dollars. The fantasy of the past, that the educational program determines the budget, has been transformed into the stark reality that the budget drives the program.

Reality-based planning will have to temper and replace our previous management psychology of more students, better equipment, more supplies, fewer teaching and working hours, and more services. The five-year plan devised originally for rationalizing growth seems to be more an exercise in self-indulgence than a realistic plan. Reality-based planning will require a different process from that used in the past. Administrators will need to develop a series of alternatives designed to meet a variety of possibilities, any one of which could become a reality. The political realities of public community colleges—dependent on year-by-year appropriations of state and local funds, usually confirmed late in the fiscal year—almost mandate option planning if the harmful effects of chaos and precipitous decision making are to be minimized.

Research designed to yield accurate and timely data will be critical in the budget process. The external requirements for data will continue to increase as greater state control intrudes on local autonomy. The ability to aggregate and interrelate data adapted to institutional goals will be a management prerequisite. A permanent planning group might enhance this process. The size and nature of the group will vary from institution to institution, depending on the size and complexity of the college. Members should represent broad general areas in the college and be as far removed from narrow vested interests as possible. A planning perspective with the greatest possible objectivity is desired.

The competition for public dollars will increase the pressures for accountability. As community colleges increasingly are required to justify their need for tax dollars, more and better data will be needed to support fiscal claims. While we must continue to rely on quantitative data, we must also work for the acceptance of community college education as a process, much of which cannot be translated into quantitative terms. The problems created by reduced resources is a common issue. Our success or failure in the future will depend on our present-day priorities.

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"Planning and reallocating" and "pruning and grafting" form two promising approaches to reducing the cost of the academic program when reductions are inevitable.

reduced resources and the academic program

richard decosmo

It is not difficult to depict a scenario for an institution facing a reduction in resources. A frequent response is to curtail, or at least to limit, the number of new programs or courses that are developed. The curtailment of new programs may occur at the state level, the local level, or both. State operatives have a tendency to react in almost a knee-jerk fashion. In Illinois an elaborate system of program designations, developed according to geography, serves to limit local program development. Even though local taxpayers pay the lion's share of the costs, they may be deprived of programs through this pattern of geographical restriction. However, these same taxpayers are indirectly supporting these same programs in other regions of the state. As a result of these geographical restrictions, young institutions have fewer programs than older ones. In such a system the needs of the local community take a back seat to the total manpower needs of the business-industrial communities and the machinations of agency bureaucrats in distributing programs to meet these needs. Such a system rarely responds effectively to emerging

(or predicted) needs, because these needs cannot easily be made to fit some predetermined state plan.

However, even without the weight of an overbearing, omnipresent state bureaucracy, many colleges choose to forgo curricular changes on their own. Because enrollments are static or decreasing and funds are limited, colleges argue that the money needed to add new programs and courses to their inventory is simply not available. For many institutions that is an accurate assessment. As finances are squeezed harder, pressure mounts to limit all expenditures to those seen as discretionary. Money spent on equipment, supplies, institutional maintenance, and management is reduced in favor of increasing salary, energy, and commodity costs. Academic programs requiring high equipment outlays will suffer under such a policy. Equipment becomes worn or obsolete. This condition leads inevitably to a deterioration of program quality and a further softening of enrollment. Lowered enrollments exacerbate financial problems. Community colleges have enough difficulty keeping pace with the changing technology in their laboratories and classrooms without the added problems brought on by dwindling finances. Faculty members cannot be expected to perform at optimum proficiency under such conditions as these, regardless of the salary they are paid. As program enrollments decline, an automatic reaction is to "retrench" course offerings. Courses offered each semester are offered once a year and alternated for day and evening students. Such a procedure necessarily furthers the enrollment decline.

Even though there is great interest in nontraditional programs, they are offered only when they reduce costs in periods of declining resources. Independent-study modes abound, but nothing is done to make these the effective delivery systems they could be. Student completion rates are low, and attempts at measuring cost effectiveness are stymied by physical and temporal barriers. In all but a few colleges, resources needed for development are meager at best. A sizable investment is needed to deliver high-quality nontraditional instruction, and the resources for such an investment simply do not exist. Many colleges therefore use the more "conservative" autotutorial method as a substitute for time- and place-free programs of nontraditional study. In general, then, because of the costs involved, nontraditional courses are easy targets for elimination in a declining fiscal environment. Programs for "nontraditional" students are also easy prey in a fiscal reduction. Debates about who should go to college are on the increase, and they call into question the open-door admissions philosophy of the community college. Since many of these "new" students are not "suited" for college, so

the argument goes, why should scarce resources be used to "salvage" them? The voices of those favoring education for only the most able seem to be increasing in volume as finances become tighter. With the advent of reduced resources, community colleges often "retreat" to the traditional two-year-college curriculum-career programs that already exist—thereby abandoning important elements of their comprehensive mission.

Other academic programs, such as teacher and learner support services, can suffer in a time of retrenchment. Media development and the use of audiovisual materials may be reduced or eliminated. The purchase of library materials, both book and nonbook, is often a target of reduction. Tutoring services and other developmental activities may be reduced or eliminated unless separate, nondiscretionary financial support is received by the institution.

The extent of these effects, of course, will vary according to the actual financial condition of the institution itself. The more severe the financial problem, the more deeply the academic program will suffer. Institutions that permit this scenario to be played out to its fullest extent, even with some variation, will soon find themselves stagnant. Extreme measures will be needed to bring them back to life.

new approaches to program change

Faced with a reduction in resources, two-year colleges must reduce the cost of the academic program. Two of the more promising approaches are "planning and reallocating" and "pruning and grafting." These approaches are described below.

Planning and Reallocation. In the past, community colleges have changed to meet newly discovered needs by simply adding programs, courses, or services. When the finances of an institution are inadequate to permit change through addition, the institution is faced with a problem of how to meet the changing needs of students and communities. The only way to keep pace is to reallocate the money that is available. This involves the reexamination of institutional goals and objectives, the development of a monitoring system to assess institutional functioning, and the implementation of a systematic approach to long-range planning. The goal is to avert or at least to deal creatively with retrenchment should it be necessary in the academic program.

One approach to the reallocation of fiscal resources is the long-range-planning approach, or *operations analysis* (Maier and Kolka, 1973). Operations analysis allows the institution to assess where it is now as

against where it wants to go in the future and to plan techniques to move toward achievement of its goals. In short, the institution evaluates existing programs, to determine how well they further its specific goals, and develops an action plan that will allow it to move in the desired direction. This plan should encompass all aspects of the institution—policies, procedures, programs, services, and staff—and should organize the academic and administrative units of the college in pursuit of its goals. As a technique for change, it is gradual. The time required to develop the goals and subgoals to guide the action plan is considerable. Also, a monitoring system must be established to measure the movement toward the established goals. Since the achievement of the goals is not expected to occur within one year, the objectives accomplished each year can be examined and corrective action taken when the desired progress is not achieved.

Another possible approach is *organizational analysis* (Parden, 1977). This technique also begins with an assessment of programs presently in place. Staff are asked to define each program in terms of its ideal methodology and results. This statement of the ideal is then compared with the results from the assessment. Finally, several key elements of each program are synthesized somewhat as follows:

1. What purpose does the program serve?
2. When was the program initiated and for what purpose? What has been the history of its growth and development?
3. Can the program be operated in a less elaborate manner and at a lower cost? What reduction in services would result?
4. Can it be combined with another activity?
5. Can it be reorganized so as to provide greater services at the same cost?
6. Can it be expanded to better meet emerging needs?

Armed with this information, decision makers can begin to eliminate, reduce, or expand the programs that are presently in place. This method lends itself to a swifter reallocation of resources than operations analysis does. It enables the institution to respond on an immediate basis to a need to reduce the costs of operation while still maintaining some element of positive change.

Regardless of the particular approach chosen, community colleges need to determine whether they are meeting the important needs of their communities. Current and projected needs must be identified and placed in a priority order. An inventory of an institution's present cluster of programs and courses will help staff determine whether current offerings match present and projected needs. Also, the quality of

the programs already in existence must be reviewed in order to determine their effectiveness and efficiency. Once established, this system should be ongoing.

At Moraine Valley Community College the evaluations of existing academic programs are called *program audits*. These audits follow the CIPP (Context, Input, Processes, Products) model (Stufflebeam, 1971), with some modifications. The audit contains a thorough analysis of the following factors: manpower needs, trends, and salaries; specific program objectives; descriptions of faculty and student characteristics, program and course enrollment trends; employment dates of graduates, cost-benefit analysis—courses and programs, faculty performance evaluations; performance evaluation of support services; faculty and student evaluations of instructional space; facilities, supplies, and equipment; student/performance in courses; and employer and graduate evaluations of the program. Information of this type can reveal the quality, the real cost, and the needs of existing programs, courses, and activities if quality is to be maintained or increased.

Program inventories and audits, coupled with a statement of institutional goals, can provide decision makers with the data needed to tackle the problem of reallocating fiscal resources. They can then decide which academic programs need to be phased out and which should be retained. By comparing the goals of the institution with its program inventory and data related to community needs, they can determine program gaps and can begin to develop new programs. If a shift in some programs is required to conserve resources, they can make such decisions on the basis of data describing their strengths, weaknesses, and costs. They can make all these, and many other decisions about the vitality of the academic program, by utilizing information gathered in the program audit.

Pruning and Grafting. Pruning and grafting—the trimming and consolidation of courses and programs offered in a community college—can result in the discovery of new resources to fund new programs or courses considered essential to the mission of the institution. Of course, the total financial condition of the institution will dictate whether or not such “grafting” of new curricula into the present curriculum is possible. Few institutions are experiencing the problems of the community colleges in the CUNY system, where drastic and immediate cuts had to be made overnight to survive. The usual condition is a gradual erosion of the financial condition of an institution over a protracted period of time. Pruning and grafting must begin early in a decline to achieve the best results.

How are sound decisions made in pruning and grafting of the academic program? The following principles deserve careful attention:

1. *Follow priorities.* All programs, existing and proposed, should be judged against the same priority list. Once priorities are determined, it should be relatively easy to establish the importance of both new and existing programs, courses, and services.

2. *Strive for excellence.* High-quality programs generate institutional support and enrollment. Resources must be available to conduct effective programs. Weak programs that are low on an institution's priority list cannot justify additional funds and should be considered for discontinuance.

3. *Complement what exists.* Programs or courses should be given serious consideration when they complement or support programs that are essential to meeting the objectives of the institution. For example, short-term, skill training for immediate employment is important to a sizable number of residents in the service area of a community college. Short certificate programs might be grafted into existing programs within the regular curriculum. Many certificate programs are eligible for CETA (Comprehensive Employment and Training Act) participation on either an individual or class-size basis. Programs of this type can attract students not otherwise interested in college attendance and can lead to their enrollment in related programs.

4. *Avoid competition.* Competition should be avoided with other community agencies or institutions and among the programs in a college. In other words, avoid duplication of services and programs.

5. *Pay attention to costs and benefits.* Programs and services with unfavorable ratios (low benefits—high costs) should be considered as areas for pruning; those with high costs and important benefits can be retained but should be viewed as candidates for cost cutting.

6. *Examine prospects for generating funds.* Courses and programs that attract more income than they consume generate funds for other projects. Only programs, courses, or services relatively high on the priority list of an institution should draw funds from its discretionary resources. All services should have as their aim the production of resources derived through improving the academic programs of the college.

7. *Examine enrollment trends.* Many community colleges have experienced growth in career programs while transfer program enrollments have decreased. Enrollment projections can help to predict where budget cuts may need to be made and additional resources allocated.

Full-time staff in one area can be permitted to decline through attrition if the warning signals are seen far enough in advance. Where a downward trend is unexplainable, some effort may be needed to "correct" the decline through special recruitment or retention efforts.

The mix and weight of these considerations may vary somewhat in any one decision. They are not so much parts of a formula as they are suggestions to prod thought. The decision-making process is political and therefore subject to a variety of pressures from a variety of sources. The more serious the consequences, the greater the pressure that will be applied. Only by focusing on some "objective" criteria can decision makers avoid yielding to pressures that may be shortsighted or self-serving.

conclusion

Even though the financial resources of most community colleges are not what they once were, most colleges still can maintain the dynamism of their early years. Clearly, however, the side of growth must be reduced somewhat, and new approaches to teaching and learning must be found. Special attention must be given to techniques that can be used to assess institutional effectiveness and to develop clear objectives that will guide institutional operations. For most colleges there is still time to deal with diminished resources. However, if the situation manages to control the college, if the steady drift to stasis is allowed to occur, and if college administrators are lulled into thinking that somehow things will work out, community colleges will gradually drift into senility without the benefit of a middle age. Their future in American higher education depends on a strong institutional research program, common sense, courage, and a stubborn desire to fulfill the essential mission of the community college.

references

- Maier, R. H., and Kolka, J. W. "Retrenchment—A Primer." *Liberal Education*, 1973, 59 (4), 433-441.
- Parden, R. J. *Organizational Analysis: A New Role for Institutional Research*. Paper delivered at annual forum of the Association of Institutional Research, Montreal, May 10, 1977.
- Stufflebeam, D. *Educational Evaluation and Decision Making*. Itasca, Ill.: Peacock, 1971.

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Administrators faced with the task of reducing resources for student services should design a system of accountability for use in the decision and allocate resources and evaluate the results accordingly.

reduction and student services

jane e. matson

Student personnel services, however defined, have been an integral part of community colleges since their inception some three quarters of a century ago. Historically, the term *student personnel* has been used to define a broad collection of activities, including but not limited to the following: admissions and records, counseling, student activities and government, financial aid, placement, and health services. Recently a broader term, *student development*, has been introduced; this new term suggests a wider concern for the total development of students and an attempt to bring about a more integral relationship between student personnel services and the other sectors of the college, especially the instructional dimension (Miller and Prince, 1976). In line with this new emphasis, student personnel programs in community colleges have become more diversified and now often include personal development courses (focusing on career choices and involving direct contact with the faculty in attacking students' learning problems and disabilities); nonetheless, the staff members at most colleges still look upon the

student personnel program as something separate and apart from the instructional program and not really central to the major purposes of the institution.

The official acceptance of student services in community colleges (as evidenced in statements of overall purpose) on an organizational level has been something of a mixed bag. It has protected student personnel from a concerted attack by other sectors of the college, but it has also blurred the need for establishing and maintaining some system of accountability. When the question of assessing the quality of services has been raised student personnel practitioners too often have responded that such assessment is practically impossible, because the effectiveness of the tasks performed is extremely difficult to quantify or measure. Justification for increases in staff and services has been based on the assumption that growing enrollments call for more staff and additional services of the type already being offered. In other words, the response of institutions to rapidly increasing enrollments in the late 1960s and early 1970s was mainly "more of the same" rather than a critical analysis of the services offered and an evaluation of their outcomes as a basis for planning.

Now there is emerging a new era of concern for outcomes, to a great extent sparked by diminishing resources and reduced growth in both the number of colleges and the size of enrollments. In the ensuing search for areas of potential economy, powerful new pressures are being applied on the college to justify expenditures in all areas, including student personnel. As a result, student personnel staffs across the country are faced with the necessity of designing an assessment system that can provide suitable guidelines for adapting both staff and services to the new adversity.

target for reduction

In the absence of an effective evaluation system—a system for determining the contribution of student personnel services to the achievement of an institution's goals—student personnel services are too often selected as an early target when the college is looking for areas to cut. At New York City Community College, for example, the very survival of student services was threatened when a succession of budget cuts tested the priorities of the institution (Sussman, 1977). Other examples can be found across the country where student services became an early focus of retrenchment because, in the judgment of administrators, it could absorb major cuts without showing many adverse effects. At the

same time, a security provision was in effect; that is, by cutting student services, administrators could avoid tampering with the instructional program, which is viewed by many as the most crucial and essential service offered by the community college. Obviously, this approach is based on a somewhat restricted view of the comprehensive functions of a community college. For example, without some special mechanism for distributing students among appropriate instructional programs, the open-door admissions policy would undoubtedly lose some of its effectiveness. Such essential functions as admissions, records, registration, determination of need for financial aid, and counseling customarily belong to the student personnel area and must be performed. They cannot be drastically curtailed or reduced without affecting the efficiency, not to mention the effectiveness, of the college.

To prescribe a systematic method of retrenchment is unwise and illogical unless the college is viewed as a total entity rather than a collection of disparate parts. Rather than considering retrenchment, administrators might more productively consider alternate methods of allocating the total resources of the college in order to increase or at least maintain a desirable level of productivity. This assumes, however, that there are reasonably valid means of measuring the productivity of a community college—not an easily verifiable assumption.

With a well-designed statement of philosophy, accompanied by a description of the goals and objectives agreed upon by significant segments of the college community, the college may be able to develop a plan for operating with decreased resources—a plan that may ultimately contribute to the efficiency of the college. This process will require a basic reconsideration of the college's mission and a careful appraisal of the resources available to implement that mission.

planning for positive change

A student personnel staff faced with the task of planning for a reduction in resources has several options, not all of them mutually exclusive. A first and certainly not desirable option would be to adjust the levels of spending in an "across-the-board" fashion, based on the assumption that all services contribute in equal amounts to the productivity of the college. It seems doubtful that this assumption could be validated to the satisfaction of all the major decision-making groups in the college. Another possible course of action would be to allow staff to make decisions about elimination or modification of positions or services in accord with their personal preferences or interests. This approach is

probably the least desirable, since there is no assurance that the needs of the institution will receive primary consideration. A better approach must therefore be found for determining the nature and level of investment of institutional resources in the area of student personnel services.

A first step suggested is to design a system of accountability that can be used to assist in the decision-making process, the allocation of resources on the basis of decision outcomes, and the evaluation of benefits forthcoming from the entire process. Such a system is predicated on the definition of a series of needs—needs that are integrally related to the overall goals and objectives of the college. Implicit in this design is a description of the target populations to be served, including a profile of their cognitive and affective characteristics.

The next step is to assess the environment within which educational activities are to be designed: the community climate or attitude toward the college, its financial support patterns, and the political forces impinging on it from within and outside. It is within these environmental constraints that student personnel services must plan and implement programs and activities. Since environmental factors that are restrictive or inimical to student personnel services will seriously limit their contribution to the goals of the college, the environment must be studied and analyzed—perhaps through the methodology of anthropology and sociometrics.

Given a reasonably adequate assessment of the educational needs of the target populations of the college and a recognizable picture of the college environment, one can develop a statement of goals and objectives for student personnel services. These goals must be internally consistent and congruent with those of the total college. Too often, goals and objectives in student personnel services are developed independently from those of the other major sectors of the college, especially the instructional area. A useful starting point would be to pose the question "How can the expertise of the student personnel staff contribute to the achievement of the overall purposes of the college?" This does not imply that student personnel services have only a supportive function, but it places a central focus on the instructional programs, which are primary to the mission of the college.

Statements of goals and objectives for community colleges frequently are developed early in the history of the institution and often do not receive periodic review and revision. Student personnel services often neglect to define the goals and objectives of specific areas or to relate them adequately to the objectives of other areas in the college. Objectives are stated in terms of ideals and not in terms of outcomes that

can be measured. If a systems approach to program development is to be even moderately successful, objectives must be stated in terms of the outcomes they produce. Without this behavioral approach, there is no way to determine the extent to which goals and objectives are being accomplished. In other words, the *real* difference that student personnel services make in contributing to the "success" of the college must be made clear.

The process of determining goals and objectives in student services is of paramount importance in the reduction process. The statement of objectives and the programs designed to lead to their achievement constitute the "raw material" for setting priorities. Without priorities, a rational, considered process of reduction is impossible. The need for reduction does not occur independently within the various sectors of the college but strikes at the total institution. For this reason, priorities must be determined first at the college level; then each sector must determine its priorities within the larger framework. Broad participation by the total staff of the college is highly desirable to the priority-setting process. Ultimately, the governing board will be required to assume responsibility for the decisions by which the college sets its course; but if the base of input into this decision process is made as broad as possible, understanding and acceptance of the decisions are more likely to result. Differences of opinion among the staff about the ranking of services and programs for reduction are inevitable, but if efforts can be made to resolve these differences and reach consensus early in the decision process, staff morale and performance should be maintained at an acceptable level.

matching students, programs, and staff

Within the student personnel area careful consideration must be given to adjusting programs in response to the changing student population. Such changes as the following are now taking place in community colleges:

1. Shifts in age patterns, from a large concentration of high school graduates to those who have already had substantial work experience; the average age of community college students now ranges from 27 to 30 years.
2. An increasing proportion of women, many of them with little or no work experience.
3. An increasing number of persons who must either make shifts in their career direction or seek entirely new career skills.

4. A larger proportion of part-time students who do not want to enroll full time because their needs and interests do not involve a prolonged commitment to higher education.

5. Increased attention to handicapped students and "senior citizens," who bring different needs to the college than the more traditional student populations.

In short, the so-called "new student," so amply described in the literature in recent years, has now become the typical student. Although the extent of these changes varies from college to college, there is clearly a national trend in the direction of community-based, performance-oriented education in community colleges across the country.

These changes have significant implications for the student personnel services that community colleges need to develop to meet the different educational needs of these groups. Because of their close involvement with the entry and exit of students, and because of their shared responsibility with instruction for the maintenance and survival of students, student services must play a special role in the assessment of student needs and the design of educational experiences to meet these needs. Another implication is the need to develop some type of system for differential staffing. With the increase in nontraditional students has come a marked increase in the employment of paraprofessionals in all areas of student personnel. Peer-counseling programs are on the increase, and there has been a marked diminution in one-to-one counseling services, with more attention given to group counseling activities.

There is a definite relationship between these trends and the reduction process, because new and redirected skills are required to assist nontraditional students, and existing staff may not have the required skills without retraining and staff development efforts. A careful and comprehensive inventory of the capabilities of the current staff should be undertaken as part of the reduction-planning process. The requirements of innovative programming to accommodate the needs of the changing student population must, of course, receive prime consideration. The tenure system and any limits imposed on hiring and re-trenchment by collective bargaining agreements may inhibit the extent to which staff resources can be matched with programmatic needs. The limits imposed by institutional constraints must be recognized and coping strategies developed to the greatest possible extent. The program structure should reflect the relationship of student services and activities to the goals and objectives of the college. This may result in the reallocation of some activities, with a consequent realignment of programs in the organizational structure.

The real priorities of a college are reflected in its budgetary decisions. Most community colleges budget student services by using the previous year's allocation as a starting point and adding to it by some more or less rationally established criteria. Recently there has been a move toward program budgeting, in which resources are allocated according to established and justified program needs. Although this approach does not meet the requirements of a "zero-based" system, it does relate expenditures to anticipated outcomes and does tend to minimize the influence of vested interests in the college. The assumption that a particular service or activity should automatically be funded at the same level, or higher, from one year to the next does not constitute a valid basis for budget decisions. The use of program budgeting makes it possible to display more clearly the relationship between input and output in student services. Such a procedure has a special significance in planning for reduction, because it allows one to estimate the effect of reduced support levels in the achievement of program goals and objectives.

As a plan for reduction is developed and implemented, some means of measuring its impact on the efficiency and effectiveness of student services should be available in order to facilitate modifications and changes. Rather than eliminating or reducing student services without the benefit of data related to their outcomes, administrators should attempt to measure the effectiveness of such programs given various levels of funding. Then, and only then, can a good decision be made about the future shape of student services.

Students now seeking services from the community college need and deserve the best efforts on the part of the college to develop appropriate programs to meet their needs. Anything less than an all-out effort would deny the promised commitment of the community college to the postsecondary education system in the United States. Reduced resources make it more difficult to succeed in achieving its mission. However, with the mustering of the creative potential of those dedicated to the community college philosophy, even reduction may provide the motive and the means of improving community college student personnel programs.

references

- Miller, T. K., and Prince, J. S. *The Future of Student Affairs: A Guide to Student Development for Tomorrow's Higher Education*. San Francisco: Jossey-Bass, 1976.
- Sussman, H. M. "Retrenchment in Brooklyn." *Community and Junior College Journal*, 1977, 47 (7), 38-41.

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By developing alternative options for accomplishing its mission and examining the cost effectiveness of these alternatives, decision-makers can act efficiently rather than reacting frantically to budget crises.

the dilemma of reduced resources: action or reaction

james l. wattenbarger

Recently institutions have encountered a dilemma of reduced resources, caused by two major factors: first, a reduced or static enrollment, which provides less money to the college; second, a reduced real income, resulting from inflation, increased costs of operation, and/or increased costs of basic items such as utilities, maintenance, and interest charges. These reductions result in the need to approach budget development on an entirely new basis. The process of taking last year's budget and adding an anticipated surplus in order to produce a new budget is no longer adequate. A more rigorous planning process must be instituted. This planning process may take one of two possible approaches: action or reaction.

An *action* approach is a productive approach. The college reexamines its basic mission and objectives and develops alternative actions for one of several future directions. The options are multiplied by information and time. Examination of these alternatives and their

cost effectiveness provides more decision-making information than was available to the college in the past. The college therefore can select and implement the best alternatives.

In contrast, a *reaction* approach is much more tentatively based and often totally unplanned. The college moves from one crisis to another and does not adequately address the long-range effects of its actions. "Reactions" are often made from an off-balance position and are the result of a high-pressure, often volatile, situation. Even if the results of an "action" are the same as the results of a "reaction," the overall result of reacting in an unplanned manner may destroy the planning procedures of the college.

It is the basic premise of this discussion that the community college is most successful in carrying out its mission—and in coping with reduced resources—if its activities are the result of a planned institutional program of action. The process of planning has been discussed by many writers. Bushnell (1973) lists three models: research, social interaction, and problem solving. From a synthesis of these models, he suggests a problem-solving strategy made up of six steps. (1) diagnosing the problem, (2) formulating objectives and criteria of effectiveness, (3) identifying constraints and needed resources, (4) selecting potential solutions, (5) evaluating these alternative solutions, and (6) implementing the selected alternatives within the college system.

When this strategy is applied to a specific college situation, there is a basis for an "action," which should result in positive procedures for coping with reduced resources. The first step in Bushnell's strategy must necessarily follow a reexamination of the mission and goals of the college. Based upon that mission, a diagnosis of the problem may be made and corrective steps identified.

Several "action" alternatives can be considered in light of the mission and goals of the college. Teaching and administrative faculty might be reduced; faculty productivity increased; programs curtailed, refocused, or consolidated; income increased by identifying new sources of funds; or college efficiency and effectiveness improved through reorganizing the management structure. Some guides in applying these alternatives may be useful.

Increasing faculty productivity

Even prior to the onset of declining resources, some colleges sought ways of increasing productivity—for example, through modifications of the lecture-discussion pattern of instruction—in order to enrich the instructional program. However, if they are not to result in

deterioration of the quality of instruction and in resentment among faculty members, such modifications must be made within the framework of an organized program of staff and program development. Increasing faculty productivity is dangerous to quality control in a "reaction" mode. It can be accomplished best in an "action" mode—one not driven merely by financial expediency.

Another way of increasing faculty productivity is to extend expertise through technical improvements in teaching. The expertise of faculty is made available to a larger group of students through videotape, individualized-learning packets, closed-circuit television, and other autotutorial devices. These methods save money if they are planned carefully and used widely over an extended period of time. If the implementation process is not carefully planned, however, short-run costs may actually exceed those encumbered in the traditional instructional methodology.

reducing full-time faculty

Some colleges have attempted to save resources by employing part-time faculty in greater numbers. The fact that five part-time faculty may teach as many classes as one full-time faculty member with half the salary cost has encouraged some colleges to become heavily dependent upon this method of conserving resources. Even if quality is maintained, academic responsibilities other than monitoring a classroom are either left undone or loaded on top of full-time faculty. Obviously, a proper balance between full-time and part-time faculty requires careful planning and implementation. Such planning can save resources and still maintain control over quality.

In a study of the methods used for reducing staff in higher education institutions, Sprenger and Schultz (1974) reported the following methods in order of frequency: not filling vacancies, terminating nontenured faculty, terminating part-time faculty, terminating teaching assistants, encouraging early retirement, giving seniority to tenured faculty, reassigning faculty, and applying performance standards. As one can easily see, these methods all appear to be part of a reaction rather than an action mode. Planned action would draw sparingly from these procedures.

assessing community needs

Most colleges do not assemble sufficient information to enable them to make sound decisions related to the academic program. Needs



assessment is a new technique to many institutions. Continuous analytical investigation of community educational needs will provide a college with a realistic basis for establishing new programs, maintaining existing ones, and curtailing or phasing out those in lowest priority. The techniques and procedures of sound needs assessment require that the college provide resources within its existing structure to undertake this activity continuously rather than occasionally. A research unit is a necessity. The Management Information System (MIS) provides a basis for cost analysis by program and therefore becomes an index of cost effectiveness as well. If the needs assessment studies identify the need for four dental assistants per year in the immediate geographical area, and the cost analysis shows that the dental assistant program costs 2.75 times as much as the nursing program, and that 75 percent of those prepared as dental assistants are working as assistants in physicians' offices rather than in dentists' offices, the college will need to examine very carefully the advisability of continuing the present limit on the nursing program and continuing the dental assistant program at its current level of enrollment. Comprehensive information permits the college to make better decisions about college operations and the budget on a basis of planned direction.

developing new resources

Many colleges have given little attention to organizing a program of resource development. Grants are developed as a specific categorical aid, and colleges often modify their programs and mission in order to receive grant funds. Such an approach to proposal writing may be best described as "reactive" rather than "active." A well-developed program of resource development should include the following elements (Young, 1977):

1. *Institutional planning.* There must be a deliberate plan to match the institution with guidelines and priorities of available grant programs.
2. *Institutional decision making and support.* The college should establish priorities among available programs and provide administrative support and resource allocation to those at the top level in order to assure greater probability of outside funding.
3. *Knowledge and information.* The college should ask members of the professional staff to acquire up-to-date information from external agencies and to apply requisite skills to interpret the college's programs and priorities to these agencies.

f 4. *Proposal preparation.* The college should incorporate faculty and staff skills in the planning and writing of proposals that are consonant with the college's mission and priorities.

5. *External relations.* The college should authorize selected representatives to promote and sell its program and proposals to the appropriate funding sources.

If these suggestions are carefully followed, community colleges can build successful resource development programs. The key, once again, is a planned program of action calculated to yield specific and demonstrable results.

evaluating management

Time and attention given to the study of "Management by Objectives" (MBO's) and the college administrative structure can either be viewed as "busy work" or as a basis for improvement of the institution. As students of management repeatedly have observed, all organizational structures tend to become self-serving. Continuing evaluation of the management structure requires the same degree of attention as was emphasized in faculty in-service programs above. When organizations do not evaluate their own effectiveness, lines of responsibility and authority may become tangled by personality differences, bureaucratic procedures, poor communication, and misunderstandings. The need for such evaluation is obvious, but the allocation of time and attention to the problem is often minimal because of our current commitment to a "reactive" (that is, crisis intervention) approach to management. "Action" requires that management provide continual opportunity and attention to such evaluation. "Reaction" results in an increased number of decisions that tend to treat the symptoms but offer no solutions to correct the causes.

references

- Sprenger, J. M., and Schultz, R. E. "Staff Reduction Policies." *College Management*, 1974, 9 (5), 22-23, 36.
- Sussman, H. M. "Retrenchment in Brooklyn." *Community and Junior College Journal*, 1977, 47 (7), 41.
- Young, J. E. "A Study to Determine Variables Associated with Success of Selected Florida Public Two-Year Community Junior Colleges in Obtaining Categorical Aid Funds from the Federal Government." Unpublished doctoral dissertation, University of Florida, 1977.

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College administrators will require a greater sophistication in planning and institutional research if they are to provide meaningful leadership in the decade ahead.

adapting to declining resources through planning and research

richard c. richardson

During a period of stabilizing or declining resources, institutional research can help two-year colleges achieve their goals by encouraging them to define their objectives carefully and to evaluate their performance as part of a broadly based planning process. In the past, most community colleges used planning and research mainly for developing new or expanded services, new programs, or more facilities. A growing number of colleges are now faced with a different kind of problem as declining full-time enrollments and strong public and legislative resistance to new programs or building are beginning to constrict growth. As a result, some administrators now assume that the need for planning has lessened since there seems little likelihood of obtaining resources to implement new plans.

There is a high risk implicit in this line of reasoning. The changing nature of community college clientele is creating new demands. Other types of institutions, both public and private, are looking with covetous eyes upon functions such as adult learning, which have kept

community colleges growing while other institutions have declined. All signs point toward vigorous competition for the declining student pool. If community colleges stagnate, society will turn to other institutions only too ready to respond to emerging needs.

If colleges are to remain adaptive in a period of declining resources, they must change by substitution rather than addition. That is, if they want to add a new program or a new service in the absence of new funds, faculty and administrators must decide what they will give up in order to initiate the change. Change in the absence of increased resources results in financial complexity. Complexity leads to pressure on existing programs to produce greater cost benefits, thereby limiting resources to those that are absolutely necessary to run a program. Thus, the task for administrators in the decade ahead will be more difficult than in the past decade and will require a greater sophistication in planning and research if they are to provide meaningful leadership.

How do administrators decide which programs and staff to retain without precipitating a revolution among those affected and the unions with which they are affiliated? Is it feasible to weaken all programs in the interests of equity, producing in the process a uniformly substandard college, or is it better to risk the wrath of tenured faculty by retrenching selectively to retain quality where it already exists and to prune out those programs that have stopped producing? Under less dramatic circumstances, how do institutions respond to pressing demands for new services, when they lack additional funds but are well supplied with marginal programs and services which function primarily to serve the needs of incumbent staff? These are the real issues of the 1970s and beyond. If institutional research contributes in a central way to providing answers to these questions, it will flourish as an integral part of the decision-making process. If it fails to make such a contribution, it may itself be an early victim of retrenchment. Institutional research can best help institutions avoid the pitfalls of declining resources as part of a central planning process.

Planning is so essential to an institution's ability to change by substitution that it must have the active involvement of the president and every line administrator who has responsibility for a budget. Of course, there must be opportunities for faculty and students to participate, but involvement as such must be subordinate to the goals of defining and implementing institutional priorities. Faculty and students are most appropriately involved at the department and division levels; they can also serve on special task forces established to deal with issues involving a broad range of interests. A central-planning steering committee

can be organized to supervise the planning process. It must remain accessible and responsive to faculty and student concerns, but ultimately the president is responsible for control of the planning process. The primary goal of planning is to secure commitment in advance from those who must implement plans and to ensure the most effective use of resources. This is particularly important where the implementation of planning may have unpleasant consequences for some members of the college staff.

Planning as defined here forces colleges to anticipate rather than react to crisis. It also provides the lead time necessary to minimize the adverse impact on individuals. If an institution becomes aware of the need to retrench an instructor because of shifting enrollment patterns, it may be able to give the instructor an opportunity to retrain in an area where there is a need for additional services. Like any decision-making process, planning is not governed exclusively by facts. Values are and should be an important part of any decision. In the example cited, the facts might reveal that resources could best be saved if an experienced instructor were retrenched and replaced with a new master's degree recruit just out of graduate school. The values of most college communities should, however, be geared to giving primary consideration to retaining those who are already members of the staff.

How does research relate to planning, and what can it do to help institutions cope with reduced resources? Hard data developed in response to critical issues can reduce the amount of time that faculty and administrators now spend on developing decision alternatives. It can also maximize the chances that the alternatives chosen will yield greater cost benefits than those selected purely on the basis of subjective inclination. Institutional research is a prerequisite for good management in a period when pressure groups demand accountability from institutions.

A separate office of institutional research represents a luxury that few institutions can afford. A more viable alternative could be an office responsible for planning and research. This office could assist in coordinating the planning process and in defining and collecting data necessary to ensure that the assumptions governing planning and the results produced by planning are as accurate as possible. While facts and information alone do not control planning, accurate data are essential to good decisions. Faculty and administrators need to be able to predict the consequences of decisions in terms of human and financial resources. They need to know where they are in order to decide how they are going to get to where they think they ought to be. They must be able to evaluate the results of deploying resources in certain ways in order to

convince both internal and external constituencies that their institution deserves continuing support. In all these ways and more, institutional research can be central to the planning process, and hence a vital factor in policy decisions. While community colleges need not be controlled by the results of such studies, the data can be used to conserve resources and to aid in the selection of the most effective alternatives.

Because planning as a process tends to be dominated administratively, the research that develops from planning may best be conducted by interested and competent members of the faculty, who can be given released time from teaching to carry out their responsibilities. While on released time, they would remain members of the faculty and of the bargaining unit if collective bargaining exists. One member of this group would report directly to the coordinator of planning and research, who may well be the president, depending on the size of the institution and the priorities of the president. In some institutions a faculty member and an administrator share responsibility for coordinating the planning process. If an institution can afford to have two faculty members on released time, the probability of maintaining continuity is enhanced. There should be no planned rotation of faculty members assigned to the planning office. The skills required for a faculty member to contribute effectively to planning and institutional research are quite rare, and the process is too important to permit anyone to become involved solely as a concession to paranoia about participation.

This arrangement is not suggested as a model for institutional research and planning. It is one way of handling these functions in a small- or medium-sized institution. If resources can be dedicated to this function, the office might well be staffed with a full-time professional administrator, as is the case in many larger institutions. It is important, however, to have faculty members with released time associated with the planning office if the research conducted and the translation of this research into the planning process are to have credibility among all constituencies. The use of a faculty coordinator makes administrators more sensitive to faculty concerns. At the same time, the faculty coordinator becomes more responsive to administrative priorities.

implementing a planning process

Two years ago Northampton County Area Community College in Pennsylvania utilized these concepts in designing a planning process that has contributed significantly to the adjustment the college has been

required to make to declining resources and the advent of collective bargaining. The first step in developing the planning process was to employ a carefully selected faculty member to do a thorough review of all available references on planning and to attend two workshops on the planning process. (The major conclusion drawn from the effort was that planning concepts are much more evident in the literature than they are in institutional practice.) The faculty member reviewed such concepts as Planning-Programming-Budgeting Systems, Management by Objectives, and other highly sophisticated approaches; however, because of the complexity of these processes and the additional work involved in implementing them, the college decided to invent its own system. On the basis of the literature available, the following goals were established:

1. Development of a visible and orderly process to help staff understand the need for change as a response to reduced resources and the contributions required from them to achieve it.

2. Identification of some degree of consensus on the specific changes that should occur and a corresponding commitment to achieve them.

3. Development of controls aimed at channeling initiative and resources into the most productive directions as an alternative to prescribing specific behaviors for staff.

4. Reduction of frustration experienced when staff pursue too many different objectives simultaneously without preexisting agreements concerning priorities.

5. Decentralization of decision making without a loss of ability to achieve goals requiring cooperative effort.

The first step in establishing the planning process was to create a planning steering committee, composed of the president; all administrators responsible for individual budgets; a faculty member (with released time), designated as the coordinator for planning and research; and a limited number of faculty and students, selected to provide liaison with the college senate and the student association. Several points were emphasized in the creation of the planning process:

1. Planning is essentially an administrative process rather than a governance process. Governance concerns itself with the ongoing life of an institution and the decisions that control day-to-day relationships. Planning, in contrast, is the sum of the decisions that an institution makes to try to shape its future.

2. Every officer responsible for a budget should also be responsible for developing a plan to establish objectives to be achieved through the annual budget.

3. The annual budget is one essential outcome of the planning process.

4. Not everything planned can be funded; however, funds will not be allocated to any objective that was not previously defined as part of a unit's plan.

5. Planning will be for a three-year period and will be updated annually through use of evaluative information concerning the achievement of objectives during the preceding budget period.

The planning process that emerged involved a series of steps and specific target dates for completion of the various steps. Beyond the creation of the planning steering committee to coordinate the process, there was a conscious effort to avoid creating additional committees or task forces. The college's administrative structure was responsible for planning, just as it was responsible for implementation.

The first step in the planning process involved the development of institutional priorities for the three-year period. Although input was solicited from the total college community, the office of the president, working with the planning and research office, identified and published the mission statement. Trustees and the college senate were asked to review and vote on the priorities in the mission statement to ensure that they were understood and accepted. While the mission statement was under review, appropriate college offices identified and disseminated the assumptions that would govern the planning process. This second step of the planning process identified such factors as enrollment projections, estimates of revenue from all sources, and other constraints within which plans would need to be developed. Institutional research had a major role in providing the data which established planning assumptions.

Given a statement of institutional priorities, along with planning constraints, each operating unit of the college was asked to develop a three-year plan. Deliberately kept as simple as possible, the plan required only a statement of objectives, through which the unit intended to contribute to the achievement of institutional priorities, along with cost estimates and an impact statement. The impact statement was extremely important because it required an assessment of the plan's effect on other areas of the college.

Once completed, three-year plans were reviewed by the planning steering committee and adopted or modified. If a plan was modified, the procedure used was to attach approved modifications in the form of an addendum, so that it was unnecessary to do any rewriting of original plans.

With an approved three-year plan, budgetary units developed their annual plan, which replaced the budget request traditionally used by the college in formulating the annual budget. In addition to normal personnel, equipment, and related requests, units were required to state proposed outcomes in measurable terms and to provide an impact statement. The annual plans were then reviewed in open sessions by the planning steering committee. Prior to initiation of the planning process, the review of annual budgets had always been accomplished by a closed hearing, involving only those administrators directly responsible for the budget in question along with the vice-president for administration. These open sessions, which were related directly to the planning process, made the entire budgeting procedure more visible, less competitive, and more of a team activity—thus contributing to the development of the staff involved. The resulting budget produced fewer hard feelings and more evidence of a direct relationship between stated institutional priorities and resource allocation. It also promoted a shared consciousness regarding the need to be cost-effective because the whole institution would be affected by careless spending.

Two additional refinements were added prior to implementation of an approved annual plan (that is, budget allocation). First of all, during the three-month period preceding implementation, staff members were given an opportunity to propose revisions to the annual plan. This step was necessary because of the one-year period that typically elapses between the presentation of the budget and final approval of the allocation. During this interim some of the assumptions may change, producing either more or less funds and a corresponding need for adjustment. The second refinement concerned grant proposals. Before the advent of a broad-based planning process, grant preparation, like many other institutional activities, had been highly competitive. As a result, discretionary state or federal funds often were channeled to the best proposal writers rather than to the areas of highest institutional priority. Under the policies governing the planning process, grant requests were reviewed by the planning steering committee, approved or rejected, and then placed in rank order as determined by the priorities of the college. This second refinement produced better grant proposals and eliminated unwanted grants.

management insights

Two years of experience with a broadly based planning process where institutional research plays a central role has furnished a number

of insights. Planning cannot produce more funds, and it will not ease the disappointment of those who cannot implement programs that they consider important. On the positive side, the process has had a marked impact upon staff development. It has forced consideration of the impact of new programs on support services before the point was reached where such services were required, and it has forced staff to be cost conscious. It has made the planning process visible and accessible, even though most faculty continue to avoid planning unless their interests are centrally involved. At the same time, there is greater awareness of the need for planning; complaints about the velocity of change, as well as the extent to which the need for change has been substantiated, have diminished or entirely disappeared. In short, the planning process seems to have provided the tools needed to deal with a situation very different from the conditions existing when the institution was founded ten years ago. The planning process, supported by the activities of institutional research, offers institutions an important alternative to management by crisis in dealing with the challenge of reduced resources.

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A vast potential remains for continued growth in community college enrollments but developing this potential requires cooperative planning and new articulation arrangements with other institutions.

growth through positive planning

dorothy m. knoell

Community colleges now appear determined to respond effectively to the expectation of reduced resources in the 1980s, just as they responded to increasing demands for postsecondary educational opportunity in the 1960s. The point of view taken here is that there remains a vast potential for continued growth in enrollment in community colleges, if goals for equal access and opportunity are to be achieved, and that the financial resources to support such growth are still a dependent variable in planning. Changes in public confidence in higher education as an instrument for economic mobility and the good life will undoubtedly have an effect on the availability of financial resources for further growth in the community colleges. Such confidence is reflected both in voting behavior with respect to taxes and bond issues and in willingness to pay on the basis of services rendered by community colleges (that is, tuition and fees).

context for proactive planning

Certain societal conditions cannot be ignored, even in a planning mode that is more proactive than reactive. First, the number of young

people in the pool from which college students have been traditionally drawn will be smaller in the 1980s. Birth rates declined in the early 1960s and show little evidence of increasing again for middle-class families. The smaller pool of potential students will exacerbate certain other conditions, which in themselves might lead fewer traditional students—that is, recent high school graduates enrolling full time in degree and certificate programs—to enroll in community colleges.

Student Aid Through the federal Basic Educational Opportunity Grant Program and other need-based aid programs, many students who previously enrolled in community colleges for financial reasons will be able to attend their first choice of college or university as freshmen. Studies have shown that many young people enroll in a community college for lower-division work mainly because the cost is low and they lack funds for tuition and subsistence at other types of institutions. With the differential in costs between community colleges and four-year institutions decreasing, and with new, need-based financial aid available, community colleges may expect to lose students in the growing competition for students among various types of institutions.

Private Vocational Schools. Various factors are making private vocational schools stronger competitors than in the past for students with occupational objectives. These factors include the new aid available to students attending such schools, their reputation for "no-frills" curricula and good job placement, and their new partnership in postsecondary education as evidenced by their representation on state-level boards and commissions for planning and coordination.

Student Affirmative Action. Community colleges are experiencing increased competition in the recruitment of ethnic and racial minorities as the result of mandated affirmative action programs in four-year colleges and universities. Institutions that formerly sought transfer students who successfully completed community college programs are now recruiting freshmen from the same limited pool of interested minority students from which the community colleges draw their students. Because of the increased availability of need-based aid and special state-funded programs for the disadvantaged, minority students apparently are being redistributed among the various types of postsecondary institutions, with a resulting loss of students from the community colleges.

Remediation In the past, large numbers of high school graduates who were deficient in the basic skills deemed necessary for college work enrolled in community colleges for remedial or developmental courses and programs. While making up deficiencies, they usually completed lower-division requirements for transfer before they enrolled in bac-

calaureate institutions. Recently, however, the latter institutions have shown new interest in offering remediation for first-time freshmen who are otherwise qualified for admission, at the same time, these institutions are considering the adoption of new requirements for the demonstration of competency in basic skills at entry to the upper division. Such changes are likely to result in the diversion of additional students from the community colleges—students previously required to enroll in two-year colleges because of skill deficiencies, as well as students deterred by the testing requirement at the point of transfer to the upper-division level.

Career Education Baccalaureate institutions are beginning to respond to the increased interest of students in career education, as evidenced by their increasing enrollments in business and commerce curricula, engineering, and health-related fields, and decreasing interest in liberal arts majors. The institutional response also involves the development of new programs designed to prepare students for employment after completing the baccalaureate degree, often in fields where community colleges have offered the associate degree. Since transfer from the community college into a baccalaureate program is discouraged because of poor articulation of career-related courses, students who in the past would have enrolled in a community college may now opt for career education in the four-year institution in order to be certain of obtaining both job preparation and access to the baccalaureate degree. There appears to be little hope for improvement in articulation in career education unless the present vertical model is expanded to include lateral and horizontal concepts.

prospects for proactive planning

Even though community colleges may well expect to lose increasing numbers of traditional students, they need not—and should not—react by planning for retrenchment. Postsecondary education has not yet fully extended itself to serve the multitude of adults 18 years of age and older who could benefit from further education but are not now participating in it. Some have stopped at high school graduation or earlier, with equivalent skills. Others are among the vast numbers of college dropouts, particularly after the freshman year. Still others have completed collegiate programs before entering employment or raising families and are ready to undertake new educational programs.

The shrinking pool of college-age youth need not result in decreased enrollments of recent high school graduates, since a sizable

number (the percentage varies among states and localities) are not now enrolled in any type of postsecondary education. College attendance continues to be highly related to family income, which in turn is related to the probability that a high school senior will take a college entrance examination and to the score on the examination. Young people from low-income families, including racial and ethnic minorities, often get low grades in high school and are poorly prepared for college, lack motivation for or interest in college work, and, if they sit for admissions tests, make relatively low scores. Findings from a new access study in California show large differences among counties in college participation and university eligibility rates. Counties with large farm populations send significantly lower percentages of young people to college than urban and suburban counties, although all but the most sparsely populated counties are served by community colleges.

The point to be made is that there remains a large pool of potential students for community colleges, including many in the 18-to-24 age group, and that decline in enrollments will continue only if institutions compete for the same "college-ready" students.

It is of course possible that public confidence in education has declined to the extent that funding for colleges and universities will not be forthcoming to implement the outcomes of proactive planning. Such withholding of support, however, would be somewhat paradoxical in light of the vastly increased resources for student aid programs which the federal government is providing to increase access, the urgency of affirmative action programs for racial and ethnic minorities, women, the handicapped, and the poor, and the present attempts of federal and state agencies to develop public policy with respect to recurrent education and lifelong learning.

In California, for example, new community college campuses and facilities are being built, and the state's five-year plan (1977-1982) for its community colleges includes an enrollment increase of 600,000 students by 2005 (an increase of 50 percent over 1975). This projection assumes a decrease in mortality rates, a fertility rate of 2.5 births per childbearer during childbearing years, and an annual net migration into California of 100,000. Plans to accommodate the 600,000 additional students reflect cognizance of the fact that the population composition of the state as well as the student-mix will change. California will experience a significant decline in the number of young people of traditional college age and a bulge in those 25 to 35 years of age. Percentage increases are also expected among minority groups because of their somewhat higher birth rates than those of Caucasians. Representation of older people in the total population is also increasing, because more

people are retiring earlier and living longer than in the past. These conditions have produced California's current community college student population: 70 percent of the students are part time, 50 percent are enrolled exclusively in late-afternoon and evening classes, a large majority are not pursuing degree or transfer objectives, and the average age is in the late 20s. Such conditions will continue into the twenty-first century.

Certain disclaimers are necessary for proactive planning. The first involves enrollment goals for community colleges and asserts that postsecondary institutions should not expect to enroll all adults of 18 years of age or older. This disclaimer is pertinent to recent high school graduates and to adults who have been out of school for several years. However, it is assumed, for purposes of planning, that most adults (far more than at present) can benefit from some type of postsecondary education at a number of times during their lives, for a variety of personal and career reasons.

A second disclaimer concerns the student's choice of institution and the family's ability to pay. The academic reputation of the community colleges has derived in large part from the performance of able students who could not afford to enroll in higher-cost institutions as freshmen. With new, need-based financial aid available and unused space in other types of institutions, such students may now enroll as freshmen in other than community colleges; that is, in private vocational schools, particularly when the program of their choice is impacted in the community college, or in four-year colleges and universities, especially with residential programs. While regretting the loss, community colleges should not try to control the enrollment of financially needy students who are ready for work in a different type of postsecondary institution, unless they can clearly demonstrate the advantages to the students of enrolling in a community college. The process whereby students from low-income families could enroll only in a community college was clearly inequitable, irrespective of gains to the institution resulting from the presence of such students on their campuses.

A third and final disclaimer is directed to the contention that the state and local community should be expected to support community colleges which attempt to serve everyone without respect to proliferation, duplication, or obsolescence of programs and services. In other words, proactive planning for the 1980s and beyond must take into account the varied offerings of all types of postsecondary institutions and agencies, with increased efforts to coordinate and articulate with them so as to promote student progress and development at the lowest possible cost to both students and taxpayers.

the new art of coping

Community colleges have reached their present magnitude, in size and comprehensiveness, largely because they have responded to changing needs and conditions. No other educational institution has responded as quickly or effectively to change. Community colleges were responsive first to the need for new higher education opportunities for increasing numbers of young people unable to enroll in baccalaureate institutions as freshmen. Having met that challenge, the community colleges were then responsive to the special needs of the academically underprepared, the disadvantaged, racial and ethnic minorities, women reentering postsecondary education, the underemployed and the unemployed, the elderly, the handicapped, and others whose needs were to be met in new types of programs and services, by faculty and staff with new backgrounds and skills.

Responsiveness now appears to be leading to retrenchment; that is, cutting back in response to the projection of declining enrollments and financial support. Fewer students or slower growth in enrollments means less funding—which, in turn, is expected to result in fewer faculty and staff, fewer programs, and no new facilities. The challenge in proactive planning is, of course, to find underserved groups and new student constituencies, whose needs the community colleges can meet under the uncertain conditions of public financing which characterize the late 1970s. To do so will require that the community colleges develop a new perspective on cooperative planning and articulation with other postsecondary institutions and manpower agencies that are also concerned with training for employment, basic education, remediation, and recurrent education for purposes other than employment.

Proactive planning suggests that programmatic considerations, not expectations about funding, should drive the planning process. Now that they no longer have to grow in response to demonstrated need, community colleges can consider the kind of student mix they would like to achieve by 2000, together with the program mix to be offered in order to obtain the desired student mix. Although few campuses or additional buildings will be constructed, community colleges still can plan outreach programs in off-campus facilities, where the desired mix of programs and students can be housed. Planners may find it more difficult to speculate about faculty and staff mixes for the year 2000 because of limitations associated with tenure, collective bargaining, and new laws relating to part-time faculty and re-

irement options. There is still room, however, for speculation about the desired mix of part- and full-time faculty, tenured and limited-contract employees, and on-campus and outreach staff, as well as the mix that reflects the goal of affirmative action plans. Finally, proactive planning involves consideration of available options (student fees, contracts and grants, state and local funds) for obtaining needed funds for the desired student, program, facilities, and faculty mix.

Although community colleges undoubtedly will not abandon their degree and transfer programs, they will surely need to plan programs and services for the large majority of students who will be attempting to achieve highly specific objectives related to their occupational and personal needs. The changing student mix in the community colleges may partly explain the decreased resources provided by the states for community college education. Although everyone agrees that lifelong or recurrent education is desirable, there is considerable uncertainty about the funding of such programs. Should they be supported largely by tax revenues and/or appropriations or by student charges? And which agency or institution should provide the programs: the unified school districts, the community colleges, or college and university extension centers (each with a different funding mechanism)? Community college planning for the future is highly dependent on the outcome of the debate about the locus of such funding for the older, part-time, nondegree students who are now a significant part of the student mix in the community colleges.

enrollment projections versus goals

In the past, projections have often been enrollment goals to be met, with fiscal penalties for both under- and overenrollment. Projections are now viewed as predictions of what will occur if nothing is done to produce a change in one direction or the other. Such projections are necessary in that they provide a baseline against which plans for changing the student mix can be tested, but they are not sufficient for planning in a proactive mode. In planning from an "action" standpoint rather than a "reactive" posture, community colleges should try to attract new constituencies (for example, the blind and the deaf), increase attendance rates among certain constituencies (for example, women over 25 years of age), and increase retention rates for selected student groups (for example, by providing support services for the educationally disadvantaged).

The suggestion that enrollment goals be established is made with the caution that the problem of goals serving as quotas for the enrollment of ethnic and racial minorities has not yet been resolved. The setting of enrollment goals in the present context is intended to relate at a specified future time to the designation of a preferred student mix, which will include subgroups such as part- versus full-time students, day versus evening students, and other categories of students. Affirmative action programs may well produce goals that should be incorporated into the specification of the student mix but should not constitute the only variables to be considered in planning.

Proactive planning is thus viewed as the manipulation of enrollment projections so as to produce the desired student mix over a particular period of years. Without denying access or opportunity in an unjust fashion to specific segments of the community, the college can project the student mix in its plans and priorities for particular programs and services. Basic to such planning is the construction of the desired student profile, in terms of both total enrollment and the proportional representation of various groups: by sex, age, racial and ethnic identification, and socioeconomic status; by enrollment status and educational objective (degree, certificate, transfer, other occupational, personal development, and other); by location (on-campus versus off-campus locations); by place of residence in the college service area (zip code or census tract); and by other variables deemed important to the college. Planning with respect to programs and services, facilities, and faculty and staff thus follows the specification of concrete enrollment goals.

articulation and cooperation

The second major theme in proactive planning involves new modes of cooperation with other agencies offering postsecondary educational opportunities in the college service area, including new concepts of articulation. As partners trying to overcome their "junior" image in higher education, community colleges have often used the performance of their transfer students as a major measure of the quality of their instructional programs. Considerable effort has been spent in the pursuit of articulation between courses and programs to ensure the smooth transition of transfer students into the baccalaureate institutions. Roles and functions have been delineated quite clearly as a result: community colleges offering lower-division courses for freshmen and sophomores with transfer objectives, and baccalaureate institutions concentrating on the major and minor, usually

in upper-division courses. Students in occupational majors were assumed, with a few exceptions, to be starting and completing preparation in the community colleges for entry-level employment in both associate degree and certificate programs.

In both planning and articulation, community colleges have tended to ignore the noncollegiate institutions and agencies offering postsecondary programs, often to far larger numbers of students than are enrolled in community colleges. These include adult schools sponsored by unified school districts, area and regional occupational centers, private vocational schools, and educational programs offered by government, business and industry, and the military. Occupational education offered at the secondary school level has also been largely ignored by community colleges, in terms of articulation, probably because of belief that preparation for college should not include such courses. Few would challenge the strong reputation achieved in occupational education by community colleges. However, programs in this area appear to have been planned for a limited clientele: recent high school graduates who enroll full time to prepare for employment.

The programs offered by these various institutions differ in requirements and rewards but have the common objective of preparing students for beginning employment—for example, as auto mechanics, vocational nurses, data processors, and cosmetologists. Multiple opportunities also exist in nonvocational areas for lifelong learners who might enroll in adult schools, community college courses, and/or college and university extension. The range of courses is very wide—from communication skills to arts and crafts and physical fitness.

Community colleges have rationalized their inattention to competing postsecondary programs on the grounds that rapidly increasing demand for postsecondary education in past years required them to be more responsive than cooperative and that, regardless of the circumstances, there should be a sufficient volume of students and funding for all agencies and institutions. There should be no unnecessary duplication or unhealthy competition, they reasoned, as long as enrollments continued to increase. However, a new era of cooperation among community colleges and other agencies offering postsecondary education is emerging as a result of several conditions. The first is state mandation (or strong encouragement) of regional planning and cooperation, as a condition for program approval and funding. The second is the condition of limited resources, which reduces the community college incentive to develop new, high-cost occupational programs. In the statutory Regional Adult and Vocational Education

Councils in California, for example, community colleges must work with regional occupational centers and programs, adult schools, private vocational schools, and the Comprehensive Educational Training Programs in order to gain approval to offer new programs. State law requires the councils to develop articulation agreements with the objective of making possible the smooth transition of students between institutions and continuous progress in their chosen specialization, while avoiding problems of duplication and inefficiency. State law now also permits community colleges, within the limits of state and local funding, to contract with private vocational schools to provide otherwise unavailable programs for their students. Private vocational schools are also to be included in the administrative structure for the statewide Articulation Conference in California, thus opening the door to transfer between these institutions and community colleges for students who seek the associate degree after completing an occupational program.

Furthermore, community colleges may soon open their degree programs to students who have had roughly comparable experiences in noncredit adult schools and regional occupational centers whose programs have long been regarded as "terminal." There is increasing recognition among community college planners that students—particularly adults—do not always follow the structured curricula planned for them. The alternative to acceptance of diversity on the part of community colleges appears to be state intervention to insist upon the transferability of work, particularly when students have been given financial aid for postsecondary education. There appears to be a growing need for community colleges to engage in cooperative planning and sharing with other postsecondary institutions and to develop new articulation arrangements to make it possible for students to move between different types of institutions in accordance with their own needs and objectives.

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Community colleges need both effective leadership and effective management if they are to cope successfully with reduced resources: the absence of one can seriously hamper the development of the other.

conclusions about coping with reduced resources

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Almost from the beginning of the community college movement, presidents, deans, and trustees emphasized a growth-oriented approach to management. A "bigger-is-better" philosophy prevailed, and institutions grew in response to constantly changing numbers of students and staff. Few if any questions were raised about the quality of management because resources were sufficient to permit multiple strategies for decision making; furthermore, mistakes could be tolerated, since the pressures of growth permitted little opportunity for looking back to determine what went wrong. Management was conducted in a trial-and-error fashion by a class of administrators who wielded considerable power and had ample resources to do what they wanted with programs, students, and staff.

As the dual impacts of stabilizing enrollments and dwindling resources were felt, the conditions for managing a community college changed dramatically. Pressures for accountability forced many institutions to reevaluate their approach to management. Gone were the days of unlimited budgets and rapid-fire innovations. In their place was a

mandate for fiscal conservatism—a call for institutions to use their resources more effectively to generate outcomes that met or exceeded the goals in their catalogs, brochures, and master plans. Most administrators reacted favorably to this mandate, but some were reluctant to make changes even though they might seem necessary to stabilize the financial condition of the institution. It was desirable to increase one's awareness of the fiscal needs and priorities of the institution, but not to reorganize management. The risks were many, and they were not worth the effort at a time when administrators were hard pressed to manage the institution in the face of competing demands for decentralization and accountability. Administrators came to believe that change was difficult to effect because conditions taking place suddenly outside of the institution were difficult to anticipate and control. At issue was the ability of the college to function as a change agent in a period of reduction. Could the community college change the structure of its management to blunt the forces of reduction, or was it capable only of reacting to such forces once they were an established fact?

Answers to this question have been slow in coming, but a host of related questions can be asked that provide insights into some of the actions two-year colleges must take to combat a reduction in resources. Clearly, administrators and others are concerned about the effects of reduction. Steps can be taken to rebuild the resource base of a college once it is threatened with reduction, but what are these steps and who is responsible for their implementation? What changes in the structure of management are necessary to cope with declining resources? In what ways can a college improve its managerial functioning to anticipate and respond to pressures for reduction? What leadership skills will be necessary to maintain or enhance the vitality of the college once it has lost a portion of its resources? These questions are fundamental to the issue of reduction. They are also basic to good management. Aggressive leadership is required, and two-year colleges are ill prepared to respond. This essay attempts to confront the issue of reduction by suggesting the kinds of management actions that will be necessary to check the forces of reduction and sustain the financial resources of the college. It presents reforms in four general areas, which go beyond the rather obvious reactions and solutions to finance problems that have been tried in past years but offer little chance for success in the 1980s.

management and leadership

The management environment in recent years has been one of shrinking autonomy as a result of the funding patterns of state boards

and legislatures, the educational needs and interests of local citizens, and the reporting requirements of the federal government. All blunt and diffuse the main purposes of the community college and shred its self-dependence. A strong dependence on external cues and stimuli leads to a lapse in the ability of the institution to build and develop its resource base. Administrators react by taking few risks and avoiding any activities for which there is no external support. Without cues from funding agencies, they maintain the status quo. With contrary signals, they either become paralyzed—overwhelmed by the enormity of the situation and thereby unable to act—or they overreact and neglect the basic principles for which the community college is organized.

To maintain the financial health of the institution, administrators need to be aware of emerging trends in the economic and social structure of the community, the fiscal condition of the state, and long-term financial prospects of various funding sources. Fiscal stability is closely related to a good organization for strategic management—the leadership process that must occur if institutions are to ensure their long-term survival. Strategic management focuses on the establishment of a set of relationships between the college and the community—relationships that enable the college to pursue its objectives with a minimum of resistance, to obtain the resources necessary to achieve these objectives over a long period of time, and to provide the structure necessary to alter its direction when community interests or institutional capabilities dictate. The benefits of this organization lie not only in satisfying the demands of interested outsiders—such as coordinating boards, legislatures, and community groups—but also in improving the effectiveness and efficiency of internal operations. The absence of an acceptable organization for strategic management can hamper a college that is attempting to counteract a reduction in resources.

What can administrators do to develop a successful organization for strategic management? Although there are no easy answers, several adaptations can be made to bring this organization about:

1. Give more attention to the long-range resource needs of the institution by implementing decision-making systems that “free” chief executives for important leadership tasks and provide them with managerial support to complete these tasks.

2. Improve the utilization of available resources by budgeting programs on the basis of outcomes they actually produce rather than staff estimates of the resources they need to produce the outcomes; critical to this procedure is the reversal of the traditional process of allocating resources as an increase or decrease over the previous year's

budget in favor of a more rigorous process of allocating resources on the basis of outcomes.

3. Ensure the continuing vitality of the college's resource base by developing a long-range planning system that specifies alternate modes of development—enrollments, programs, staff, and facilities—given various levels of resources.

4. Deepen the awareness of external groups—legislatures, offices of executive government, and state boards—to the resource needs of the institution by organizing a lobby to press for support and to raise important questions about existing finance formulas.

These adaptations are keyed to the idea that certain basic changes in the structure and functioning of management can improve the resource base of a community college. Administrators will devote more time to building and conserving resources when they can appreciate the leadership skills necessary to counteract a reduction in resources. Programs can operate at higher levels of efficiency and effectiveness when they are budgeted on the basis of the outcomes they produce and have systematic and comprehensive information about alternate modes of development given different resource levels. And external agencies can better understand and appreciate the resource needs of a college when they are on the receiving end of repeated communications concerning the mission of the college and the inequity of current finance formulas.

outcomes and benefits

Increasingly, discussions of community college finance formulas are beginning to focus on the question of benefits and who should bear the costs. Community colleges are supposed to "do something to students" with their programs and resources, yet rare are the instances of effective research on the outcomes of community college attendance; of communicating the results of programs and services to constituencies; of setting institutional goals with realistic outcome measures in mind; of relating the costs of educational programs to the outcomes they produce; or of assessing the effectiveness of programs in producing benefits that are needed by the community. It is unreasonable to expect increasing support for institutions that cannot and will not report the results of their programs to funding sources.

The question of "benefits" and the value of community college education to the community is a critical issue in the area of finance. In a recent study of the outcomes and costs of community college education,

Wenckowski (1977) identified four types of benefits that community colleges are supposed to produce: economic, social, individual, and monetary. "Individual" and "monetary" benefits accrue to the student and are realized as growth in the areas of socioeconomic status, cultural enrichment, political awareness, ability to allocate time and money, career development, and job mobility. "Social" benefits are more difficult to define but generally are believed to result from change in the ability of students to interact with diverse groups, to adjust to change, and to develop meaningful relationships with different types of people. "Economic" benefits accrue to both the individual and the community and are realized through such indicators as employment opportunities for graduates, expenditure patterns of the college in the community, and job opportunities for community residents.

This listing certainly encompasses a number of desirable benefits, but it does not answer the question of how effective community colleges are in producing these benefits. Faculty and administrators interested in building and conserving resources need to develop a systematic approach for assessing benefits if they expect to receive continuing support for their efforts. This approach necessarily should involve some type of research design for measuring community educational needs, the resources required to meet these needs, and the benefits produced by the college in relationship to the costs and other forms of input. (A research design has been developed for this purpose; see Alfred, Matson and Fordyce, 1977.)

One strategy for measuring benefits is to design a classification structure that delineates broad categories of benefits produced by two-year colleges when they have the financial capability to perform a comprehensive educational mission. Some of these categories and their data elements are the following:

1. *Student growth and development*: (a) knowledge and skills development, (b) social and cultural growth, (c) personal growth and satisfaction, (d) career training, (e) community service, (f) educational development.

2. *Institutional service to community needs*: (a) demographic characteristics of the community, (b) adult citizen needs/satisfaction, (c) high school student needs/satisfaction, (d) business-industrial needs/satisfaction, (e) civic organization needs/satisfaction.

3. *Institutional impact on the community*: (a) educational impact, (b) social impact, (c) service impact, (d) economic impact, (e) labor market impact.

4. *Impact of institution on other educational institutions*: (a)

secondary schools, (b) public and private four-year colleges, (c) proprietary schools, (d) other types of educational institutions.

These categories can be refined even further to describe the benefits of community college education in highly specific areas. It is possible, for example, to describe the impact of college in facilitating student growth and development through collecting data related to the following measures:

Student Knowledge and Skills Development

- Student development concerning *breadth* of knowledge
- Student development concerning *depth* of knowledge
- Student success in passing certification and licensure examinations
- Student grades in major field and general courses
- Student scores on pretest and posttest skill examinations
- Faculty perceptions of student skills
- Student perceptions of skill and knowledge development

Social and Cultural Growth

- Participation in social and cultural events
- Knowledge and understanding of the arts
- Development of effective social relationships
- Openness to new ideas

Personal Growth and Satisfaction

- Student satisfaction with overall educational experience
- Student satisfaction with vocational preparation
- Student satisfaction with knowledge and skills learned in general courses
- Student satisfaction with critical-thinking ability
- Student satisfaction with human relations skills

Career Training

- Student success in obtaining *first* job
- Student success in obtaining *preferred first* job
- Occupational career choice
- Job satisfaction
- First job earnings
- Annual total income of former students
- Relatedness of employment to major field of study
- Change and stability of career goals
- Job mobility

Promotions

Employer evaluation of job performance

Community Service

- Residence in community in which college is located
- Participation in community social affairs
- Memberships in community organizations
- Political activities in community

Educational Development

Highest degree or certificate earned

Students enrolled in an organized educational activity for no credit

Program completers during a certain time period

Program completers who entered as transfer students

Degrees and certificates earned by an entering class of students

Time to program completion for a *graduating* classTime to program completion for an *entering* class

Length of tenure prior to transfer

Stopout

Number of withdrawal credits

Incidence of change of major field

Educational program dropouts

Students seeking advanced degrees and certificates

Students working toward and receiving a second degree or certificate

Student ability to transfer credits

Level of achievement of former students in another institution

Number of students transferring to other institutions

Enabling policymakers to weigh and sift the evidence about the benefits of college education, outcome measures are a critical ingredient in building the resource base of an institution. An institutional data vacuum invites external intervention and domination, either through an imposed plan or through ad hoc legislative decisions that restrict the flow of resources to a college. A well-thought-out method for measuring outcomes—a method based on realistic assessment of an institution's impact on students—invites external support and cooperation rather than control. Community colleges should at the very least know more about the benefits of their programs than external agencies do. Outcomes assessment provides one method for collection of this information and ensures an adequate resource base for the institution to pursue its mission with a minimum of resistance.

building a power base in the community

The role of the community as a power broker for institutional support is becoming more important as financial resources grow tighter. Community colleges exist to serve the needs of the community and its diverse constituencies, and this role is most powerfully elicited under a condition of full financial support. Faculty and administrators must be aware of the educational needs of the community, and they must establish a climate in which the community will become deeply involved in what the college is doing and will therefore actively support the college in its quest for resources. Specifically, faculty and administrators must provide community groups with information that they can use to make their own judgments about the value of a community college education. Administrators then can selectively utilize the influence of community leaders in relationships with state and local agencies responsible for funding decisions.

Many administrators see themselves as powerless to elicit the support of the community on key finance issues. They argue that public apathy toward higher education has never been greater and that never before have community colleges experienced such a dilemma in the institutional budget. This is an unfortunate outlook because at no time in their recent history have two-year colleges been expected to contribute more to the economic and social development of the community.

Two-year-college administrators may experience difficulty in gaining the confidence and support of the community because of problems of their own making. Chief among them is a problem of perceived intransigence in the management of the college, heightened awareness of this problem as a result of negative publicity, and frustration if the college is unable to provide services that are viewed as essential to the community. Administrators can solve this problem by bringing the community into the management of the college through a four-step approach to reform:

1. Involve the community in a systematic program of needs assessment to determine the vitality of college programs and services and their eligibility for further support.

2. Expand the function of program advisory committees to include responsibilities for the establishment, evaluation, and financing of programs in the career sector of the college.

3. Establish functional advisory committees composed of community experts in every phase of college operations (media, manpower training, federal affairs, public relations, institutional planning, and so

on) to guide college personnel in their relationship with the community.

4. Appoint and utilize a citizens advisory council to help administrators identify key finance issues facing the college as well as appropriate management actions that can be taken to resolve these issues.

These actions go far beyond the normal public relations activities of a two-year college, they mean presenting institutional aims, organizing finance alternatives, and involving the community in institutional decisions to relate what the institution is all about to what the community is now and will be in the future. Only very limited progress toward this end is now being made in most colleges, but it may be the most important task of administrators in the next decade.

identifying key issues

Although good internal management and community support are necessary for preserving the financial resources of a community college, they are not sufficient in themselves to adapt the institution to changing resource conditions. Administrators must be able to identify key issues facing the institution and locate the resources necessary to help the college achieve its goals.

Few would dispute the contention that there is a big difference between management and leadership in the area of finance. Problems that might initially appear to be only temporary aberrations in the growth of community colleges can rapidly swell into critical issues if they are not fully understood by decision makers. Several such problems, which received little or no attention in the 1960s and early 1970s, now command significant amounts of time and energy on the part of administrators:

1. What is the position of the two-year college in the struggle for public resources? Should it be viewed as a public utility, or does it "enjoy" a different status from other public agencies and thereby require different financial arrangements?

2. In a period of declining resources, what happens to youth and older adults who cannot attend college because of the cap on enrollments? Is there a shortage of trained manpower in certain areas? Are there noticeable changes in the rates of social disorganization? What effects, if any, does an untrained labor pool have on the local tax base?

3. What are the "real" costs to state and local agencies of post-secondary education programs conducted by two-year colleges. Can two-year colleges conduct these programs more efficiently and expertly than other types of institutions, or are the cost benefits greater

elsewhere? What insights do administrators have into educational costs in other institutions, and how do community colleges compare?

4. What are the impacts of community college programs and services on the community, and what is their dollar value? What steps need to be taken to ensure that reasonable and accurate indicators of impact are considered in the financial deliberations of state boards and legislatures?

To cope with these issues, administrators must have "conceptual" skills. A president or dean must be more than a manager or an idea man. He must have a sense of perspective and the time and inclination to think about the pressures for change; and he must raise the fundamental questions that will affect the future of the institution and the community in which it is located. There are risks in taking the initiative. The greater risk is to rely on outside forces for guidance in determining the financial well-being of the college.

The essential point of perspective in this paper is that community colleges need effective leadership and effective management if they are to cope successfully with reduced resources. The absence of one can seriously hamper the development of the other. A thorough understanding of the concepts of leadership and management is not a luxury but a necessity for survival. One cannot stress too heavily this need, for growth in these areas is at the very heart of the reforms that two-year colleges will need to undertake to stabilize their finances and maintain their place at the cutting edge of higher education.

references

- Alfred, R. L., Matson, J. E., and Foidyce, J. W. *Assessing Effectiveness in the Community College*. Unpublished paper, 1977.
- Wenclofski, C. *Community College Finance Patterns: A Description with an Analysis of the Maryland Finance System*. Columbia, Md.: Howard Community College, 1977.

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sources and information for coping with reduced resources

andrew hill

This concluding article provides additional references pertinent to the financial crisis in community colleges. Unless otherwise noted, all sources are in the ERIC system.

The list of references includes ERIC documents dealing with state finance and planning, federal aid, college management and planning systems, and nontraditional education and community services programs in a time of financial exigency. Lack of space prohibits lengthy description of these documents.

These ERIC documents, unless otherwise indicated, are available on microfiche (MF) or in paper copy (HC) from the ERIC Document Reproduction Service (EDRS), Computer Microfilm International Corporation, P. O. Box 190, Arlington, Virginia 22210. The MF price for documents under 480 pages is \$0.83. Prices for HC are as follows: 1-25 pages, \$1.67; 26-50, \$2.06; 51-75, \$3.50; 76-100, \$4.67. For materials having more than 100 pages, add \$1.34 for each 25-page increment (or fraction thereof). Postage must be added to all orders.

Abstracts of these and other documents in the Junior College Collection are available upon request from the ERIC Clearinghouse for Junior Colleges, Room 96, Powell Library, University of California, Los Angeles, California 90024.

Bracketed publication dates are approximate.

financial patterns

- Alvarado, A. (Comp.). *About Community College Finance. A "Brief" Highlighting Important Literature since 1973 about Finance in the Community College.* Los Angeles: ERIC Clearinghouse for Junior Colleges, 1977. 17pp. (ED 140 928)
- Community College Finances, 1975-76.* [New Jersey]. Trenton: New Jersey State Department of Higher Education, [1976]. 55pp. (ED 118 198)
- Federal Categorical Aid Programs, Fiscal Year 1976.* Washington, D.C.: National Council for Resource Development, 1976. 46pp. (ED 132 986)
- Financial Report of the County Colleges of the State of New Jersey for the Fiscal Year Ended June 30, 1976.* Trenton: Office of Community College Programs, New Jersey State Department of Higher Education, 1977. 143pp. (ED 134 248)
- Financial Support for the California Community Colleges. Characteristics, Objectives and Alternatives. Commission Report 77-3.* Sacramento: California State Postsecondary Education Commission, 1977. 202pp. (ED 142 263)
- Fiscal Year 1978 Operating Budget Recommendations for the Illinois Public Community College System.* Springfield: Illinois Community College Board, 1976. 61pp. (ED 135 418—available in microfiche only.)
- Garms, W. I. *Financing Community Colleges.* New York: Teachers College Press, 1977. (Available from Teachers College Press, Teachers College, Columbia University, New York, N. Y. 10027, for \$7.50.)
- Hauselman, A. J., and Tudor, O. *Compendium of Selected Data and Characteristics, 1976-1977.* Lexington: Kentucky University, Community College System, 1977. 99pp. (ED 144 664)
- Hughes, G. E. *State Community College Systems in Illinois and Tennessee: Historical, Philosophical, Legal and Financial Elements.* Unpublished paper, [1976], 38pp. (ED 135 442)
- Illinois Community College Board Statewide Master Plan for Community Colleges; RAMP/CC: 1977.* Springfield: Illinois Community College Board, 1977. 194pp. (ED 135 447)
- Long, J. J. *Financial Report, Fiscal Year Ended June 30, 1976.* Hartford:

Connecticut State Board of Trustees for Regional Community Colleges, 1977. (ED 135 415—available in microfiche only.)

Mississippi Public Junior Colleges Statistical Data, 1975-76. Jackson: Division of Junior Colleges, Mississippi State Department of Education, [1976]. 57pp. (ED 134 241)

Report for Public Community Colleges, 1974-75. Tallahassee: Division of Community Junior Colleges, Florida State Department of Education, 1976. 98pp. (ED 121 383)

Report of the Task Force to Implement Senate Bill F346 on Funding Support for Community College Education in Michigan and Their Mission and Roles and State-Local Relations. Lansing: Michigan State Board for Public Community and Junior Colleges, 1977. 86pp. (ED 134 286)

Statewide Master Plan for Community Colleges in Maryland, Fiscal Years 1977-1986. Annapolis: Maryland State Board for Community Colleges, 1976. 224pp. (ED 122 883)

Wattenbarger, J. L., and Starneš, P. M. *Financial Support Patterns for Community Colleges, 1976.* Gainesville: Institute of Higher Education, Florida University, 1976. 127pp. (ED 132 994)

planning and management

Listou, R. E. *Financial Management in Higher Education: An Approach to Improvement. Advanced Institutional Development Program (AIDP) Two-year College Consortium, Vol. II, No. 3.* Washington, D.C.: McManis Associates, [1976]. 32pp. (ED 133 022)

Matrix for Planning. Boston: Massachusetts State Board of Regional Community Colleges, 1975. 77pp. (ED 125 677)

McCain, J. C. *Resource Development Programs in Two-Year Colleges: A National Survey. A Report to the National Council for Resource Development.* Washington, D.C.: National Council for Resource Development, 1975. 8pp. (ED 133 030)

Priest, B. J., and Pickelman, J. E. *Increasing Productivity in the Community College: An Action-Oriented Approach.* Washington, D.C.: American Association of Community and Junior Colleges, 1976. 40pp. (ED 125 721)

State University Trustee Committee on the Special Problems of the Community Colleges. Final Report. Albany: Board of Trustees, State University of New York, 1976. 57pp. (ED 134 244)

Toler, T. M. *PPBS: Its Impact upon Curriculum Decisions.* Unpublished paper, [n.d.]. 21pp. (ED 136 897).

impact on services

- Adult School and Community College Finance*. Sacramento: California State Postsecondary Education Commission, 1976. 29pp. (ED 136 872)
- Douthit, N. C. *The Future of Adult Education in Oregon Community Colleges*. Coos Bay: Southwestern Oregon Community College, [1976]. 41pp. (ED 129 357)
- McIntyre, C. E., and Wales, C. A. *Evaluation of a Non-traditional College: Costs and Effectiveness*. Seattle: Research Planning Office, Washington State Board for Community College Education, 1976. 76pp. (ED 131 881)
- Roed, W. *State Funding Community College Community Services Noncredit Offerings: Current Patterns and Problems*. Unpublished paper, [1976]. 13pp. (ED 133 008)
- Zoglin, M. L. *Financing Community Services Instruction*. Paper presented at the Annual Conference of the California Community College Community Services Association, Monterey, Calif., March 1977. 27pp. (ED 140 882)

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