ABSTRACT

Members of the Council of Universities and Colleges present recommendations and practical strategies in the area of curriculum development in this monograph. Louis Bender discusses strategies for curriculum revision. James Wattenbarger and Sandra Scoaggs relate organization theory to the process of curriculum change. Raymond Schultz and Carl Webb offer a curriculum evaluation model. Paul Starnes and Fred Wellman recount ways in which the various state agencies influence curricula. Several authors discuss the process of curriculum formation in the context of specific programs. Richard Richardson, Jr., Mike Swacc, and Stewart Poht present a case study in career education. Sig Pislov shows how the community college president should talk with industrial leaders in order to better shape curriculum. Richard Rinehart describes the process of defining goals. Other authors consider ways of formulating plans for general education. James Hammons presents the results of a survey asking deans how they perceive general education. Walter Hunter offers arguments in favor of a competency-based general education program. Al Smith and Janette Martin argue for developing the integrated teaching of values. Arthur Cohen discusses issues in curriculum formation for the 1980's. Andrew Hill contributes an annotated bibliography. (Author)
directions
FOR
COMMUNITY
COLLEGES

shaping the
curriculum

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editor's notes

This issue of New Directions for Community Colleges is about the curriculum—what it is, how it is built, the definitions and philosophy on which it rests. Curriculum is central to institutional purpose, and public perceptions of curriculum play a large part in determining who attends the college, who is employed there, and how the college is supported. While previous books in this New Directions series have addressed segments of the curriculum, no issue has addressed the total curriculum pattern of the college.

The volume has been written entirely by members of the Council of Universities and Colleges (a group of 100 professors and other specialists affiliated with the American Association of Community and Junior Colleges) and is a result of their interest in two-year college education. These writers are not necessarily experts in curriculum formation but they are involved with the colleges in several ways. They consult with community college administrators, interact with practitioners at conferences, teach courses about the community college, serve on accreditation teams, conduct research on community colleges, and read the publications of those institutions. They are advocates, teachers, leaders, and spokespersons for the ideas that affect college operations.

These contributors were asked particularly to write about the process of curriculum formation—to minimize the arguments favoring certain curriculums and to eschew descriptions of program operations. They were asked to direct their chapters toward recommendations for practical strategies and action. Accordingly, Lou Bender discusses strategies for curriculum revision. Jim Wattenbarger and Sandra Scaggs relate organization theory to the process of curriculum change. Ray Schultz and Carl Webb offer a curriculum evaluation model. Paul Starnes and Fred Wellman recount the ways in which the various state agencies influence curricula.

Several authors discuss the process of curriculum formation in the context of specific programs. Dick Richardson, Mike Svaco, and Stewart Rooth present a case study in career education. Sig Rislov shows how the community college president should talk with industrial leaders in order to better shape curriculum. Richard Rinehart describes the process of defining goals.

Several authors consider ways of formulating plans for general education. Jim Hammons presents the results of a survey asking deans how they perceive general education. Walter Hunter offers arguments
in favor of a competency-based general education program. Al Smith and Janette Martin argue for developing the integrated teaching of values, a prime component of a general education curriculum.

My own chapter discusses issues in curriculum formation for the 1980s. Andrew Hill contributes an annotated bibliography.

Jim Hammons, Chairman of the Council of Universities and Colleges' publications committee, set this issue in motion originally when he asked me to put it together. Bonnie Sanchez, associate director of the ERIC Clearinghouse for Junior Colleges, contributed her invaluable assistance in coordinating the manuscript preparation.

Arthur M. Cohen
Editor
Successful curriculum change demands the involvement of numerous groups.

curriculum revision and the process of change

james l. wattanbarger
sandra scaggs

While most people will assert that change in our lives is constant, while the concept of future shock has already taught the American public that change occurs more rapidly than had been thought, while the evidence of change is seen in almost every phase of our daily lives, it is also true that change in an institution of higher education comes painfully and slowly. Changing a curriculum, changing the course content, changing the strategies for teaching—all of this is recognized by faculty and administrators alike as difficult if not impossible. The acceptance of the status quo or of tradition is pervasive. College faculties do things a certain way because they have always done them that way.

However, educational institutions are not immune to the effects of change in the larger society. The agrarian values and skills which shaped the curriculum a few generations ago are no longer adequate for the urban technological America of the late twentieth century. Society now has different purposes, different needs. Changing the purposes of education certainly involves philosophical reconsiderations, but the vehicle for change is the curriculum. As Heffel (1969, p. xix) observed: “The curriculum remains the central means to an educational institution’s ends; and if the curriculum is irrelevant, it must be changed.”
The curriculum must be changed—but how? Everyone talks about changing the curriculum, but as any educational practitioner knows, planned and implemented curriculum change is a rare commodity. Hundreds of books and articles document the need for curriculum change. Dissemination strategies and adoption patterns have been thoroughly discussed in the literature. Still the success rate for planned curriculum changes is dismally low.

Moreover, the literature is strangely silent on possible similarities of strategy in cases where implementation was successful. This perhaps is due to what Gross, Giacquinta, and Bernstein (1971, p. 1) have observed, that ordinarily the only variable under consideration is the change agent's ability to overcome the organization member's initial resistance, whereas the implementation of a new program really depends on quite a number of variables.

In fact, much of the literature on curriculum change treats initiation as synonymous with implementation. This is due to the unfortunate assumption that if a curriculum change is well-designed and based on sound theory, nothing remains but to see it initiated. As a matter of logic, one must give some credence to the thesis that, since curriculum change is carried out in an organizational environment, it is of necessity going to be modified somewhat by interaction with the organization in which it is implemented.

Baldridge and Deal (1975, p. 3) in their discussion of change point out the critical part played by the organization: "Educational innovations are examples of social inventions adopted primarily by complex organizations, not by individuals."

Quite a number of elaborately planned curriculum innovations have foundered on the reef of the organization. Implementation of the new math in the K-12 schools a few years ago is a case in point. Because of organizational responses and accommodation mechanisms, implementation of the new math curriculum was widely varied. In some schools the new system was added to the old; in others, concepts were selectively implemented by grade level or other arbitrary designation; in still others the new curriculum was imposed by edict; and in all cases implementation depended finally on the commitment of the classroom teacher. All this clearly led to a lack of uniformity which the best of designs could not have anticipated.

To accommodate a change of curriculum, the college must make certain changes in its organization. It would be helpful if these could be foreseen. However, most of the literature on change in educational organizations deals either with curriculum change or with organizational change, treating these areas as separate entities rather than as parts of an integrated whole. The curriculum experts concentrate on changes in the curriculum, the organization experts concentrate on
changes in the organization and there appears to be little exchange of information between the two. It is perhaps for this reason that the planning of curriculum change has been so well documented while the implementation of those changes has not. As Miles (1965) points out: "To use an image from Gestalt psychology, specific planned change attempts have most typically been 'in figure,' occupying the focus of attention, while the organization itself has remained in the 'ground.'" He states further, "I think it fair to say that there has been an over-emphasis on the properties of a particular innovation itself, its diffusion across systems, and its integration within systems, without a corresponding degree of interest in the dynamics and functioning of the receiving organization as such" (p. 11-12).

The educational institution that seems most likely to be disposed to curriculum change, and to therefore have mechanisms for handling it, is the community college. Because of its involvement with life-long learning programs, the community college should have an ability to implement those minor curriculum changes necessary to meet the changing needs of a varied student population. Such curriculum changes frequently involve apparently simple modifications like the addition of a new course or the insertion of modular units of instruction within existing courses. Such changes would not disturb the organization and require the cooperation of only a few people, thus diminishing the problem of individual resistance to change.

This thesis is questioned, however, by those faculty members in community colleges who have attempted to initiate even minor structural curriculum changes. They agree that there is freedom to modify the content of courses already being taught, but point out that, as soon as a proposed change requires institutional approval or cooperative arrangements among instructors, the situation changes dramatically.

However, since curriculum offerings in community colleges do change, there must be some procedure which can effect such change. The literature on organization theory seems to point to decision making as the primary function of an organization. Feldman and Kanter (1965, p. 614), for example, view organizations as "systems for making decisions." These authors show how the making of decisions is influenced by the structure of the organization itself when they discuss the "constraints which the controlling members of the organization impose on the decisions made by other members." They point out that "most organizational decisions are highly constrained. Choice is determined by rules which specify the alternatives to be selected when various contingencies occur" (p. 641).

The proliferation of administrative levels in an organization appears to require that many decisions become routine; therefore they are made according to rules. But then the organization's original
objectives tend to be forgotten, and rules are observed for their own sake. As Merton (1957, p. 199) expressed it: "Adherence to the rules, originally conceived as a means, becomes transformed into an end in itself; there occurs the familiar process of displacement of goals whereby an instrumental value becomes a terminal value. Discipline, readily interpreted as conformance with regulations, whatever the situation, is seen not as a measure designed for specific purposes but becomes an immediate value in the life-organization of the bureaucrat. This emphasis, resulting from the displacement of the original goals, develops into rigidities and an inability to adjust readily." Or, as Griffiths (1964, p. 434) succinctly phrased it: "The more hierarchical the structure of an organization, the less the possibility of change."

Organizational factors related to decision making are not the only impediment to successful curriculum change. Economic conditions in the 1970s have further complicated that process. During the expansionary 1950s and 1960s, curriculum leaders in most educational institutions could devote their attention to the quality and desirability of proposed curriculum changes, knowing that funding could be found if a decision to implement was made. Decisions on minor curriculum changes (in one course rather than an entire program) were generally made by curriculum committees. The decision to allocate resources tended to be based on the educational value of the change rather than priorities caused by today's economic woes.

However, today more than in the recent past, instructors, department chairmen, and others in community colleges who are concerned with keeping instructional programs current find that curriculum decisions must undergo rigorous scrutiny twice: once by instructional experts and again by the institutional officer who controls allocation of funds.

As the curriculum is at the heart of an instructional program, it is apparent that the allocation of resources is at the heart of the effective management and efficient operation of any enterprise. Especially in the climate of Proposition 13, those responsible for institutional allocation of resources are looking for better answers to the traditional questions: What programs and courses should be added, continued, or eliminated? What mix of instructional programs, research, and public services can be afforded? Does potential student interest justify support of a new course or program? And, most important, how should priorities be established?

Successful implementation of curriculum change, then, can be seen to depend on skillful manipulation of several interrelated organizational variables. First, the relative rigidity with respect to the rules and the tallness of the hierarchy associated with a particular community college must be realistically assessed by anyone interested in imple-
menting a change in its instructional program. A successful campaign, whether political, military, or social, requires an accurate scouting report on the nature of the terrain. It should be obvious that a strategy for accomplishing curriculum change in a college with five decision-making levels will be different from that of a college with two, or from that of a college where the standard answer with regard to any change refers to the policy manual by section, subsection, and paragraph rather than to a justification of the change based on institutional goals.

Second, having discovered the ground rules imposed by the environment, the change advocate must assess the decision-making structure in the college. Who makes decisions about the educational worth of curriculum changes? Does the same person control the funds necessary to implement the change? If not, who does? And what is the power relationship between the curriculum decision-maker and the person who controls the resources?

A serious assessment of these organizational variables is almost certain to disclose a tangle of interrelatedness among them. Management studies indicate that rigidity with respect to rules tends to go hand in hand with very tall organizational structures. One could assume, then, that decision-making with respect to resource allocation would be highly centralized in that type of organization. However, the authors' informal survey of academic deans and vice presidents in Florida's community colleges in the spring of 1978 tends to refute such an assumption. The deans and vice presidents were asked to respond to the following question: Is there one person who must give his approval for curriculum modifications no matter which department or division is initiating the modification? Only thirteen of the twenty-three respondents indicated that there was one such person in their institution. In addition, nine of the thirteen responding in the affirmative represented colleges having the fewest hierarchical levels. As seems to be true with much educational research in this area, there does not appear to be an established verity to which to cling—which leaves the practitioner, as usual, to rely on his or her own resources. If, however, those resources include considered strategies based on what is known of organizational properties, the task of implementing curriculum change may only be unusually difficult rather than impossible. From a fairly extensive study of theory and research on organizational structure and decision making, it is possible to make some suggestions as to potentially successful strategies.

Kurt Lewin (1948), one of the theorists who has developed and expounded a theory of change, has pointed to three basic steps in achieving change: unfreezing the field; carrying out activities which induce change; and refreezing at the new or different level.
Change literature in general stresses several factors which facilitate change. One of these is active, overt support by the college leadership. Without such support, change simply will not occur, except perhaps temporarily. Support must be obvious and clear.

There must also be a climate conducive to change. Free and open communication would seem to be essential. A positive attitude toward change is essential. The removal of barriers to change would be helpful—procedures, time, height of organizational structure, outside controls, information availability. These and other factors which encourage positive attitudes are needed.

There must be a change agent. A change agent may be an individual or a group or an influence that causes the current situation to be altered. The change agent may be within the structure or may be brought in from outside for this specific purpose. Occasionally the change agent may be an unintended or accidental agent, who is there for another purpose but nevertheless becomes an agent for change in this situation.

There must be clear provisions for retraining staff where necessary. There must be security for those affected. The change must be seen as helpful in achieving goals. All of these help in removing resistance.

One of the first tasks of the administrator is to determine the availability of resources. There are several sound reasons for having first-hand knowledge of the ability of the college to allocate funds, personnel, and space to a new curriculum effort, not the least of which has to do with a great saving in time and effort in the case that resources are really in such limited supply that none can be diverted to a new use.

Normally, however, it will be discovered that proper management plus reallocation of existing resources or reexamination of priorities will result in the identification of resources which can be made available for change. Thus the change advocate has an advantage when priorities for use of available funds are established. In addition, the instructor or department head who can present a reasoned plan for allocating resources is apt to be given more favorable consideration than one who simply makes a request and waits for someone else to attend to the details.

The major barrier to the implementation of this strategy (in the past, at least) has been the reluctance of budget officers to make information available, and the equal reluctance of the average faculty member to learn how to analyze budget information.
are an administrative prerogative. Furthermore, his findings indicated that most faculty members are "uninterested in diverting time from their important academic pursuits to the financial affairs of the university" (p. 278). While his study specifically excluded two-year postsecondary institutions, it is likely that the faculty of the community college would resemble its counterpart in the four-year institution to a large extent.

Such disinterest in financial affairs can actually work to the advantage of the change advocate. Possession of accurate information is a major key to influencing decisions. If the change advocate is the only person who has bothered to obtain that information, he obviously occupies an advantageous position.

In addition, recent legislation at both federal and state levels concerning open access to public records makes it much easier than before to compile information on the total budget rather than that of a single department or division. The importance of access to the entire budget cannot be underestimated. In many instances, only by considering the entire budget can a change advocate make a reasonable argument for the diversion of funds and personnel to the particular curriculum change he favors.

The importance of an accurate and complete understanding of the budgetary process, as well as the budget document itself, is borne out by responses to an open-ended question in the survey of Florida community college academic deans and vice presidents previously mentioned. The question was: When it is agreed that a curriculum modification is highly desirable, but regularly budgeted institutional funds are not sufficient to cover the cost of offering it, what options would be available? Only four of the twenty-three respondents indicated that the only alternative would be to wait until additional funds were available through normal channels. Fifteen respondents indicated that a search for state, federal or private grants would be a viable alternative and ten indicated that budget reallocations based on realigned priorities would be an acceptable option.

Determinations of the availability of resources is, however, only a first step. As Hefferlin (1969, p. 44) somewhat wryly points out, "not only must the necessary resources be available for reform, but an advocate must succeed in gaining access to them." Strategies for gaining access to resources must, it appears from reports of organizational research, involve a careful study of the organization of the particular institution and its decision-making structure. When attempting to discover what the institution and its decision-making processes are really like, one who is a member of the organization finds both advantages and disadvantages connected with insider status.

Probably the major disadvantage is that, as an employee, he
obviously must be extremely tactful and discrete in attempts to acquire information. While there is no need to be secretive, one still must avoid irritating or alienating potential sources of information. Another important disadvantage is the inability to be totally objective about an organization of which one is a member. However, remembering that the task is not to write a scholarly report, but to acquire the information necessary to increase the chance of successfully implementing curriculum change, objectivity is probably required only to the extent that one can thus avoid making tactical errors.

The important advantage, which probably outweighs any disadvantage, is that of proximity. The insider can make daily observations of organizational routines, can make inquiries on an informal basis, and very likely has relatively easy access to necessary persons and documents.

What kinds of information are useful to the person who wishes to attempt curriculum change? Probably the most readily obtainable information is that on the formal organization. The organizational chart should provide answers to several important questions about the formal organization. How many administrative levels are there in the area of academic affairs? Are curriculum committees or advisory groups a part of the formal organization? What is the formal chain of command? What does the formal communications network look like? Does the business office have a direct link to the instructional area?

After determining what the organizational functions of each administrative level are supposed to be, the informal network must be investigated. Most organizational researchers have commented on the importance of informal patterns of influence and authority, which do not necessarily match the organizational chart. Even the least administratively sophisticated faculty member knows that some of his colleagues have little trouble getting administrative support for their activities while others seem to have to fight for every paper clip.

Why? At least part of the answer lies in the functioning of the informal organizational network. It may be that Instructor A realizes that Instructor B plays an occasional set of tennis with the academic dean, and therefore A makes a point of keeping B informed about the interesting and innovative things he is doing in his classroom. Or it may be that Instructor A has observed that departmental requests for special curriculum funds are more frequently approved if the chairman of the curriculum committee is in favor of the project, regardless of whether the department chairman is or not. Instructor A, naturally, exerts his greatest efforts to win the support of the curriculum committee chairman for his own favored projects.

It is in the assessment of the informal network that the insider
has the greatest advantage. He is in a position to make regular and
intimate observations, to attend meetings to discover who really is
influential, to determine whether authority for decision-making is
closely held by the person who occupies the organizational chart posi-
tion or if that authority is delegated or even abdicated. The insider can
also more easily determine the effective power balance between those
who make curriculum decisions and those who allocate resources.

Having collected as much information as seems practicable, the
change advocate must interpret this information in light of his task—to
implement a particular curriculum change. A plan should be devel-
oped which takes into account everything learned about the institution
and how it functions. If it has been learned that one particular person
consistently favors successful curriculum changes, the plan should
include a strategy for involving that person as an advocate. If one key
administrator has control of the purse strings, the plan should include
a strategy for convincing him of the benefit to the institution which will
result from the proposed change. Perhaps the college structure has a
diffuse decision making system. In this case a good strategy may be to
present the decision makers with a carefully worked out budget, which
incorporates the change and indicates how little other areas would be
affected by it.

Whatever the choice of strategies, one important tactical con-
sideration should be remembered. It is still true that "you can catch
more flies with honey than with vinegar." Or as Moore (1962, p. 195)
noted in his discussion of human relations in organizations: "When you
attack my job, you attack me. When you push your own values at my
expense, you become my enemy. When you fail to understand my
interests and values, you are perverse, deliberately obstinate, intellec-
tually stupid, and possibly even morally incompetent."

From a practical standpoint, in this kind of campaign, the fine
art of persuasion may be the most potent weapon, but whatever the
weapon, it must be used in the context of a theoretical base. Such a
base has been the focus of this discussion and involves the three steps
described previously.

First, one must go through a process of unfreezing. A climate
for change, a favorable attitude toward change, the overt support of
the college leadership, and the use of a change agent will help to
accomplish this.

Second, one must prepare for the change. A period of plan-
ing, study, fact finding, reinforcement is required.

Finally, the refreezing must occur with security, adequate
resources, and the development of new skills.

In all of this the administrator must be positive and supportive.
Only then can real change take place.
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An evaluation model employing available data can quickly identify programs needing more careful review.

A screening model for community college program evaluation

Raymond E. Schultz
Carl Webb

Educational institutions at all levels have been negligent in carrying out systematic curriculum evaluation. This is not surprising since, until recently, there were few incentives for them to do so. Enrollments were growing, and financial support was relatively easy to obtain; institutions could expand their curricula with little difficulty. Approval for such expansion by governing boards and agencies was not difficult to obtain in most instances. But that situation has changed drastically in recent years.

Several conditions have combined to bring the former period of easy curriculum expansion to an abrupt halt. One of these is the stabilization, and even the decline, of enrollment. Another is the continued high rate of economic inflation. Added to these is a growing expectation—if not requirement—by governing boards, state agencies, and legislatures for accountability in all phases of institutional operation. Given these developments, it becomes readily apparent that systematic program review is no longer an activity which institutions can ignore.
without running a serious risk of having such review done by an external agency.

A practice which has resulted from increased emphasis on curriculum review is "curriculum addition through attrition": Institutions are confronted with "trade-off," which means that they find it necessary to discontinue an existing program in order to add a new one to their curriculum.

The need to conduct systematic curriculum evaluation confronts comprehensive institutions such as community colleges with a difficult problem. Extensive time, effort, and human resources would be required to conduct detailed in-depth evaluations of each program in the curriculum. As a consequence, such an undertaking is highly impractical if not impossible. What they need is a procedure that permits a systematic general review of their programs to identify those which appear to need in-depth investigation. This process of "flagging" permits an institution to concentrate its time and resources on a manageable number of programs for detailed evaluation. In turn, it assists the managers in making informed decisions as to which programs can continue basically unchanged and which ones should be strengthened, modified, or eliminated.

In order for this general review process to be functional, it needs to meet at least two conditions: it must (1) have sufficiently broad parameters so that it can be applied to a wide range of programs, and (2) it must use a data base that already exists for the institution, or can be readily developed.

The model

Tables 1 through 6 (pages 15 to 28) present a program evaluation model that was developed for use in a multi-campus community college district. The model is equally applicable to a single-campus community college as to other types of institutions. The adaptability of the model is illustrated in the explanations that follow.

In order to evaluate an educational program quantitatively, certain Program Evaluation Areas must be identified in which data are readily available. Table 1 presents five suggested Program Evaluation Areas: (1) Enrollment Characteristics, (2) Cost Analysis, (3) Instructional Conditions, (4) Student Success, and (5) Utilization of Instructional Space. These Program Evaluation Areas form the framework on which the model is constructed. Other areas could be added or deleted, depending on individual institutional requirements.

Within each Program Evaluation Area certain dependent variables must be identified, together with the corresponding independent variables and the functional relationship that will be used to provide a
quantitative measure of the parent Program Evaluation Area. Table 2 presents the Program Evaluation Areas with some dependent and independent variables and the corresponding functional relationship. Any of the variables and the functional relationships can be varied to suit individual institutional needs.

Each functional relationship was established with some criteria in mind that would allow for a horizontal (same dependent variable) comparison among programs. The larger the numerical value of any dependent variable under a given set of conditions, the better that variable meets the criteria established by the functional relationship. A value of one means the dependent variable satisfies the established criteria, while a value greater than one implies the variable exceeds the criteria and a value less than one that it does not meet the criteria.

using the model

The model can be used in at least three modes: a horizontal mode in which like dependent variables are compared between programs; a vertical mode where a program score is established for each program and then this score used as a basis for comparing programs; and a combination mode that compares both program scores and dependent variable values.

Table 3 shows the model in the horizontal mode. The value of each dependent variable is called the factor. For example, the enrollment trend factor could be compared for all programs in the district or any subset of those programs. Those programs whose factor is less than some predetermined value could be subjected to further review. A similar comparison should then be made for each of the other program dependent variables.

Table 4 shows the model in the vertical mode. The computations of the factors are identical to the computations in the horizontal mode as shown on Table 3. In order to establish an equitable program score, it is necessary to allow for the relative importance attached to each Program Evaluation Area and the corresponding dependent variables. This is accomplished by assigning an area weight to each Program Evaluation Area such that the sum of the weights is 100; and then assigning a dependent variable weight to each dependent variable such that the sum of each of the dependent variable weights for each evaluation area equals the corresponding area weight. Each factor is then multiplied by the corresponding dependent variable weight to produce a dependent variable score. The scores are then added to produce evaluation area scores which are added to produce a program score. This score represents a composite judgment of the program being evaluated. An institution using this model can use this program
score in several ways: (1) It can set a cut-off level score (i.e., 60, 65, 70 etc. points) and undertake a detailed evaluation review of programs which fall below that level; (2) the institution can decide how many programs it wishes to subject to detailed review based on available institutional resources for this purpose and select that number of programs from those which receive the lowest scores; (3) for programs that score low it can examine areas which account for a program's poor score in order to make individual judgments as to whether such programs should undergo detailed review. The composite mode is not illustrated.

It is suggested that a committee of faculty and administrators be established to determine the parameters for the model and that a separate model be constructed for transfer, vocational and general education programs. Care must be taken to ensure that any single program does not exert undue influence on the model constructed for its program cluster.

testing the model

The vertical mode of the model was tested on five vocational programs at Pima Community College, Tucson, Arizona. Pima is a multi-campus community college, enrolling about 21,000 students (head count). Table 5 represents the evaluation of the machine tool technology program.

Since Pima College does not use program budgeting, the district operating costs had to be adjusted in order to produce a properly scaled factor for the program cost measure. The average program costs, the average program FTSE (for the programs evaluated) and the actual district FTSE were used to establish the adjusted district costs. This figure was then used in the independent variable to establish the program cost factors.

An upper bound of 1.5 was placed on all factors in the model to keep any single factor from producing an unrealistic program measure score that could mask other measure scores. No lower bound was placed on low or negative factors.

The three previous semesters were used in the independent variables for enrollment characteristics rather than the previous three years. This was strictly a matter of convenience. The success of program graduates in the student success evaluation area was not calculated.

Other programs evaluated included Air Conditioning/Sheet Metal (Program score 71.4); Automotive Technology (Program score 102.2); Electronics (Program score 80.6); and Fashion Design and Clothing (Program score 61.4). If an arbitrary program score of 70
were established as the cutoff criterion, two of the five programs (Machine Tool Technology and Fashion Design and Clothing) would have been identified for further evaluation.

Table 6 was developed in order to further illustrate the flexibility of the model. Revised independent variables and functional relationships were developed for the three dependent variables in the area of Instructional Conditions. The criteria used in developing the original functional relationships implied that the best instructional conditions involve no part-time faculty sections, no full-time faculty teaching overloads, and a stable part-time faculty. The revised criteria used the college district ratio of full-time faculty sections instead of no part-time faculty sections, the district ratio of full-time faculty teaching overloads instead of no overloads, and finally the district ratio of new part-time faculty instead of total part-time faculty stability.

Table 1. Program Evaluation Model

<table>
<thead>
<tr>
<th>I.</th>
<th>Enrollment Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>II.</td>
<td>Cost Analysis</td>
</tr>
<tr>
<td>III.</td>
<td>Instructional Conditions</td>
</tr>
<tr>
<td>IV.</td>
<td>Student Success</td>
</tr>
<tr>
<td>V.</td>
<td>Utilization of Instructional Space</td>
</tr>
<tr>
<td>Program Evaluation Areas and Dependents Variables</td>
<td>Independent Variables and Functional Relationship</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>--------------------------------------------------</td>
</tr>
</tbody>
</table>

**I. Enrollment Characteristics**

A. Enrollment Trends

- Current Program Enrollment
- Average Enrollment Previous 3 Years

B. Class Size Trend

- Current Average Class Size
- Average Class Size Previous 3 Years

**II. Cost Analysis**

A. Comparative Costs

- Institutional Costs per FTSE
- Program Costs per FTSE

B. Program Income vs. Costs

- Program FTSE + District FTSE
- Program FTSE + District FTSE

**III. Instructional Conditions**

A. Full-Time Faculty Utilization

- FTF Sections – FTF Sections
- FTF Sections

B. Full-Time Faculty Without Overload

- FTF – FTF Teaching Overload
- FTF

C. Continuing Part-Time Faculty

- PTF – New PTF
- PTF
IV. Student Success
   A. Student Success
      = Passing Grades Received
         Enrollment at the End of Drop/Add
   B. Completion Trend
      = Completion Past 12 Months (Diplomas)
         Average Completion Previous 3 Years
   C. Graduates Success
      = Completers Past 12 Months Engaged in Program-Related Activities
         Annual Average Completers Previous 3 Years Engaged in Program-Related Activities

V. Utilization of Instructional Space
   A. Space Utilization
      = Program Course Enrollment
         Student Stations Available

FTSE = Full-Time Student Equivalent (15 student credit hours = 1 FTSE).
FTFE = Full-Time Faculty Equivalent (15 faculty load hours = 1 FTFE).
FTF = Full-Time Faculty.
PTF = Part-Time Faculty (not employed as FTF).
<table>
<thead>
<tr>
<th>Program Evaluation Areas and Dependent Variables</th>
<th>Independent Variables and Functional Relationship</th>
<th>Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. Enrollment Characteristics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Enrollment Trends</td>
<td>Current Program Enrollment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Average Enrollment Previous 5 Years</td>
<td></td>
</tr>
<tr>
<td>Enrollment</td>
<td>772 771 762 761 Average</td>
<td></td>
</tr>
<tr>
<td>B. Class Size Trend</td>
<td>Current Average Class Size</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Average Class Size Previous 3 Years</td>
<td></td>
</tr>
<tr>
<td>Average Class Size</td>
<td>772 771 762 761 Average</td>
<td></td>
</tr>
<tr>
<td><strong>II. Cost Analysis</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Comparative Costs</td>
<td>Institutional Costs per FTSE</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Program Costs per FTSE</td>
<td></td>
</tr>
<tr>
<td>District Costs</td>
<td>772</td>
<td></td>
</tr>
<tr>
<td>District FTSE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program Costs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program FTSE</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
B. Program Income vs. Costs

\[ \text{Program Income vs. Costs} = \frac{\text{Program FTSE} + \text{District FTSE}}{\text{Program FTFE} + \text{District FTFE}} \]

III. Instructional Conditions

A. Full-Time Faculty Utilization

\[ \text{FTF Sections} - \text{PTF Sections} \]

\[ \frac{\text{FTF Sections}}{\text{FTF Sections}} \]

B. Full-Time Faculty Without Overload

\[ \text{FTF} - \text{FTF Teaching Overload} \]

\[ \frac{\text{FTF}}{\text{FTF}} \]

C. Continuing Part-Time Faculty

\[ \text{PTF} - \text{New PTF} \]

\[ \frac{\text{PTF}}{\text{PTF}} \]

IV. Student Success

A. Student Success

\[ \text{Passing Grades Received} \]

\[ \text{Enrollment at the End of Drop/Add} \]
<table>
<thead>
<tr>
<th>Program Evaluation Areas and Dependent Variables</th>
<th>Independent Variables and Functional Relationship</th>
<th>Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passing Grades Received Enrollment 45th Day</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. Completion Trend</td>
<td>Completion Past 12 Months (Diplomas)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Average Completion Previous 3 Years</td>
<td></td>
</tr>
<tr>
<td>Diplomas and Certificates Awarded</td>
<td>76/77 75/76 74/75</td>
<td></td>
</tr>
<tr>
<td>C. Graduates Success</td>
<td>Completers Past 12 Months Engaged in Program-Related Activities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Annual Average Completers Previous 3 Years</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Engaged in Program-Related Activities</td>
<td></td>
</tr>
<tr>
<td>Graduates in Program Activities</td>
<td>76/77 75/76 74/75</td>
<td></td>
</tr>
<tr>
<td>V. Utilization of Instructional Space</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Space Utilization</td>
<td>Program Course Enrollment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Student Stations Available</td>
<td></td>
</tr>
<tr>
<td>Enrollment Stations Available</td>
<td>772</td>
<td></td>
</tr>
</tbody>
</table>
Table 4. Program Evaluation Model—Vertical Mode

<table>
<thead>
<tr>
<th>Program Evaluation Areas and Dependent Variables</th>
<th>Independent Variables and Functional Relationship</th>
<th>Factor</th>
<th>Factor × Weight = Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Enrollment Characteristics (Area Weight = __________)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Enrollment Trends</td>
<td>= Current Program Enrollment</td>
<td>= ______ ( ) × ( ) = ______</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Average Enrollment Previous 3 Years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enrollment</td>
<td>772</td>
<td>771</td>
<td>762</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. Class Size Trend</td>
<td>= Current Average Class Size</td>
<td>= ______ ( ) × ( ) = ______</td>
<td>Area Score ______</td>
</tr>
<tr>
<td></td>
<td>Average Class Size Previous 3 Years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average Class Size</td>
<td>772</td>
<td>771</td>
<td>762</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II. Cost Analysis (Area Weight = __________)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Comparative Costs</td>
<td>= Institutional Costs per FTSE</td>
<td>= ______ ( ) × ( ) = ______</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Program Costs per FTSE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>District Costs</td>
<td>District FTSE</td>
<td>Program Costs</td>
<td>Program FTSE</td>
</tr>
<tr>
<td>772</td>
<td></td>
<td></td>
<td>30</td>
</tr>
</tbody>
</table>
Table 4. Program Evaluation Model—Vertical Mode (continued)

<table>
<thead>
<tr>
<th>Program Evaluation Areas and Dependent Variables</th>
<th>Independent Variables and Functional Relationship</th>
<th>Factor</th>
<th>Factor</th>
<th>Weight</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>B. Program Income vs. Costs</td>
<td>Program FTSE + District FTSE = ______ ( ) × ( ) = ______</td>
<td></td>
<td></td>
<td>Area Score ______</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Program FTF = District FTFE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Program FTSE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>District FTSE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Program FTFE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>District FTFE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

III. Instructional Conditions (Area Weight = ______)

A. Full-Time Faculty Utilization = FTF Sections - PTF Sections = ______ ( ) × ( ) = ______

<table>
<thead>
<tr>
<th>FTF Sections</th>
<th>PTF Sections</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

B. Full-Time Faculty Without Overload = FTF = FTF Teaching Overload = ______ ( ) × ( ) = ______

<table>
<thead>
<tr>
<th>FTF</th>
<th>FTF Teaching Overload</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

C. Continuing Part-Time Faculty = PTF - New PTF = ______ ( ) × ( ) = ______

<table>
<thead>
<tr>
<th>PTF</th>
<th>New PTF</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
IV. Student Success (Area Weight = __________)

A. Student Success = \( \frac{\text{Passing Grades Received}}{\text{Enrollment at the End of Term/Day}} \) = ______ ( ) \( \times \) ( ) = ______

B. Completion Trend = \( \frac{\text{Completion Past 11 Months (Diploma)}}{\text{Average Completion Previous 3 Years}} \) = ______ ( ) \( \times \) ( ) = ______

<table>
<thead>
<tr>
<th>Diploma and Certificates Awarded</th>
<th>16/77</th>
<th>75/76</th>
<th>74/75</th>
<th>73/74</th>
<th>Average</th>
</tr>
</thead>
</table>
| C. Graduates Success = \( \frac{\text{Completion Past 11 Months (Engaged in Program-Related Activities)}}{\text{Annual Average Completers Previous 3 Years Engaged in Program-Related Activities}} \) = ______ ( ) \( \times \) ( ) = ______

<table>
<thead>
<tr>
<th>Graduates in Program Activities</th>
<th>16/77</th>
<th>75/76</th>
<th>74/75</th>
<th>73/74</th>
<th>Average</th>
</tr>
</thead>
</table>

Program Evaluation Model—Vertical Mode—continued

<table>
<thead>
<tr>
<th>Program Evaluation Areas and Dependent Variables</th>
<th>Independent Variables and Functional Relationship</th>
<th>Factor</th>
<th>Factor</th>
<th>Factor × Weight</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>V. Utilization of Instructional Space (Area Weight = __________)</td>
<td>A. Space Utilization = ( \frac{\text{Program Course Enrollment}}{\text{Student Sessions Available}} )</td>
<td>______ ( ) ( \times ) ( ) = ______</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Enrollment</th>
<th>Sessions Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>772</td>
<td></td>
</tr>
</tbody>
</table>

Program Score ______
<table>
<thead>
<tr>
<th>Program Evaluation Areas and Dependent Variables</th>
<th>Independent Variables and Functional Relationship</th>
<th>Factor</th>
<th>Factor</th>
<th>Weight</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Enrollment Characteristics (Area Weight = 20)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Enrollment Trends = Current Program Enrollment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average Enrollment Previous 3 Years</td>
<td>449</td>
<td>(1.04)</td>
<td>(10)</td>
<td>10.4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>772</td>
<td>771</td>
<td>762</td>
<td>761</td>
<td>Average</td>
</tr>
<tr>
<td></td>
<td>449</td>
<td>391</td>
<td>467</td>
<td>436</td>
<td>431.9</td>
</tr>
<tr>
<td>B. Class Size Trend = Current Average Class Size</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average Class Size Previous 3 Years</td>
<td>16.6</td>
<td>(.99)</td>
<td>(10)</td>
<td>9.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>772</td>
<td>771</td>
<td>762</td>
<td>761</td>
<td>Average</td>
</tr>
<tr>
<td></td>
<td>16.6</td>
<td>15.6</td>
<td>16.6</td>
<td>16.7</td>
<td>16.7</td>
</tr>
<tr>
<td>Area Score</td>
<td>20.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II. Cost Analysis (Area Weight = 10)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Comparative Costs = Institutional Costs per FTSE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program Costs per FTSE</td>
<td>527.1</td>
<td>(1.22)</td>
<td>(5)</td>
<td>6.1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>772</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5,981,555.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>District Costs</td>
<td>11,348.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program Costs</td>
<td>29,376.03</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>69.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. Program Income vs. Costs = Program FTSE + District FTSE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program FTFE + District FTFE</td>
<td>.0049</td>
<td>(.51)</td>
<td>(5)</td>
<td>2.6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>.0095</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Area Score</td>
<td>8.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Program Evaluation Areas and Dependent Variables</th>
<th>Independent Variables and Functional Relationship</th>
<th>Variable</th>
<th>Factor</th>
<th>Factor</th>
<th>Weight = Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program FTSE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>District FTSE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program FTFE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>District FTFE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>771</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**III. Instructional Conditions (Area Weight = 25)**

A. Full-Time Faculty Utilization

\[ FTF \text{ Sections} - PTF \text{ Sections} \]

\[ \text{FTF Sections} = 6 \]

\[ \text{PTF Sections} = 19 \]

\[ = -13 \times (-2.17) \times (10) = -21.7 \]

B. Full-Time Faculty Without Overload

\[ FTF - FTF \text{ Teaching Overload} \]

\[ FTF = 1 \]

\[ = 0 \times (0) \times (5) = 0 \]

C. Continuing Part-Time Faculty

\[ PTF - \text{New PTF} \]

\[ PTF = 11 \]

\[ = 6 \times (.55) \times (10) = 5.5 \]

New PTF = 5

Area Score = 16.2

**IV. Student Success (Area Weight = 30)**

A. Student Success

\[ \text{Pasting Grades Received} \]

\[ \text{Enrollment at the End of Drop/Add} \]

\[ = 200 \times (.71) \times (15) = 10.7 \]

\[ \text{Area} = 35 \]
Passing Grades Received
Enrollment 45th Day

200
280

B. Completion Trend

= \frac{\text{Completion Past 12 Months (Diplomas)}}{\text{Average Completion Previous 3 Years}}

= \frac{3 (1.5)}{2} = 22.5

Diplomas and Certificates Awarded

76/77 75/76 74/75 73/74 Average
5 0 2 1 1

C. Graduates Success

= \frac{\text{Completers Past 12 Months Engaged in Program-Related Activities}}{\text{Annual Average Completers Previous 3 Years Engaged in Program-Related Activities}}

= \frac{( )}{(0)} = 0

Graduates in Program Activities

76/77 75/76 74/75 73/74 Average

V. Utilization of Instructional Space (Area Weight = 15)

A. Space Utilization

= \frac{\text{Program Course Enrollment}}{\text{Student Stations Available}}

= \frac{449 (.81)}{555} = 0.121

= 12.1

Enrollment

= 555

Stations Available

= 12.1

Program Score 58.1
### Table 6. Program Evaluation Model

**Revised Independent Variables For**

**III. Instructional Conditions**

**A. Full-Time Faculty Utilization**

\[
\text{Program FTF Section} + \text{Program Sections} = \frac{\text{District FTF Section} + \text{District Sections}}{\text{District FTF on Overload} + \text{District FTF}}
\]

**B. Full-Time Faculty Without Overload**

\[
\text{Program FTF on Overload} + \text{Program FTF} = \frac{\text{District New PTF} + \text{District PTF}}{\text{Program New PTF} + \text{Program PTF}}
\]

**C. Continuing Part-Time Faculty**

\[
\text{District New PTF} + \text{District PTF} = \frac{\text{Program New PTF} + \text{Program PTF}}{\text{Program FTF on Overload} + \text{Program FTF}}
\]
It should be pointed out that this model is not meant to be an all-inclusive evaluation device but only an initial screening tool to help institutions identify programs for an in-depth review. Other evaluation areas and dependent variables can be added to the model in order to adapt it to the needs of other institutions. The suggested variables were ones thought to be readily available in most institutions. The model was designed for computerization in order to facilitate the rapid screening of many programs.

Public post-secondary institutions of all types are confronted probably to a greater extent than any time in the past with the need for systematic program review. This paper presents a model that can assist institutions in this review process. It has the virtue of being easy to apply and adaptable to the priorities and conditions of a given institution. Its use will assist an institution in deciding which program to subject to a detailed review, thus effecting efficiency in time and resources.

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State agencies have an important role in the planning and coordination of community college instructional programs.

In many states one or more state agencies are involved in shaping the curriculum for its public community/junior colleges. Such involvement may include curriculum planning, consultation, development, formulation, management, approval, evaluation, coordination, and/or funding depending on the organizational and governance structure for the public community/junior colleges in that state.

There may be a separate state agency and/or board for the public community/junior colleges. In some cases, such as Minnesota and Virginia, this state board may be the governing board for the public community/junior colleges, with responsibility for the establishment and management of the curriculum. In other cases, such as Maryland and California, the state board may be a planning and coordinating board, while governance for the community colleges rests with local district boards. In still other states, the state agency responsible for the public community/junior colleges may be (1) an office in a state board or department of education that also has responsibility for public elementary and secondary education, such as in Pennsylvania and Florida; (2) an office in a state university system, as in Georgia and Kentucky; (3) a board with responsibility for both vocational education...
and community colleges, as in Colorado; or (4) an office in a state board or department for higher education, as in New Jersey and Texas. Even in many of the states that have a separate state board for community/junior colleges, new curriculum proposals may have to be reviewed and/or approved by a state board of higher education or a postsecondary education commission.

Illinois is an example of a state with a board for community colleges that serves in a planning-coordination role since governance-management responsibilities for the individual colleges rest with local district boards of trustees. However, the Illinois Community College Board (ICCB) is vitally involved in helping to shape the curriculum of the public community colleges in Illinois through its statutory responsibilities for (a) statewide planning; (b) coordination of programs, services, and activities; (c) organizing and conducting feasibility studies for new community colleges; (d) determining efficient and adequate standards for instruction, teaching, curriculum, and libraries; (e) approval of new units of instruction at a community college, including curricula and majors; and (f) approval of courses for state funding reimbursement. In addition, the Illinois Board of Higher Education has statutory responsibilities for statewide planning, approval of new curricula, and approval of out-of-district programs for the public community college as submitted by the ICCB along with similar curriculum responsibilities for the public universities in the state.

This article describes the process for the development and approval of new curricula for the public community colleges of Illinois with the ICCB, the classification and definition of instructional programs by the ICCB, the ICCB evaluation of instructional offerings, and the types of cooperative and contractual agreements for offering instructional programs in Illinois.

development and approval of new curricula

Each community college is expected to use local and state manpower studies, surveys of local business and industry, input from local advisory committees, and information from regional and statewide conferences and publications in the preparation of new curriculum proposals. The Illinois Community College Board Office sponsors statewide workshops on specific curricular concerns, conducts regional curriculum development/planning meetings annually, coordinates statewide articulation committees of two-year and four-year college representatives to develop guidelines for baccalaureate-oriented curricula, and provides staff consultant services to the colleges. Using information gained from local and state sources, the community colleges
assess the needs and decide which programs each would like to place into operation.

The college submits a preliminary proposal form for new units of instruction (curricula and majors) in its annual Resource Allocation and Management Plan (RAMP) which is filed with the ICCB Office each summer. However, the college may submit a proposal for a new unit of instruction to the ICCB Office at any time during the year if emergency needs develop, and such proposals would be considered as an amendment to the college's annual RAMP master plan. Both new curricula which the college hopes to establish during the coming year and those it hopes to establish within the next five years are submitted each year in the RAMP master plan.

The ICCB Office then duplicates the new instructional proposals and distributes them to other state agencies such as the Illinois Board of Higher Education, the Illinois Office of Education's Department of Adult, Vocational, and Technical Education (the agency responsible for federal adult and vocational education funds), and the Illinois Department of Registration and Education (the occupational licensing agency). The ICCB Office also distributes each proposal to neighboring community college districts and, in cases where the program would be regional or statewide, to college districts having similar programs. These new instructional proposals are also presented at the regional deans' meetings each fall. Every college district with an interest in the establishment of the proposed program has an opportunity (through ICCB invitation) to voice any concerns it may have about the program. Concerns transmitted to the ICCB Office from the colleges and/or other state agencies are considered a part of the decision process which results in the ICCB Office either encouraging or discouraging further development of a formal application from the college for official ICCB approval of a new unit of instruction. The ICCB Office also notifies the college of the concerns it has received on each new proposal.

The college then may proceed to the second phase of the state approval process for new curricula by completing a detailed application form and appending appropriate supportive documentation for review by the ICCB Office and other state agencies. Usually, the college proceeds to this second phase only if "encouraged" to do so by the ICCB Office; but sometimes it does so even when it was "discouraged," knowing that the ICCB Office or some other state agency has some serious concerns about the proposal. The formal application for ICCB approval of a new unit of instruction includes sections on: (1) program description, (2) justification, (3) three-year enrollment projections, (4) cooperative agreements, (5) articulation with other
schools and agencies, (6) financial estimates on the first three years of 
operation, (7) courses and their estimated costs per credit hour, and (8) 
special required data applying to occupational programs (manpower 
studies, local advisory committee recommendations, state licensing 
requirements, and other similar data).

After reviews and evaluations of the detailed program proposal 
application by the ICCB staff and the IBHE staff, any additional 
concerns which may have surfaced must be addressed by the college 
before the ICCB staff will present the proposal to the ICCB members 
for action. One of the following three actions usually results: the 
college may not be able to resolve the expressed concerns from the state 
office and withdraws the application; the college submits additional 
data, but the program is still considered unsatisfactory and is dis-
approved; or the college submits data that are considered satisfactory 
and the program is approved by the ICCB. After ICCB approval, the 
ICCB staff forwards the new proposed curriculum to the Illinois Board 
of Higher Education for action. New units of public service must also 
be approved by the ICCB and IBHE if they exceed certain funding 
limits.

The Illinois Community College Board has delegated to its staff 
the responsibility to grant approval or disapproval to the colleges for 
certain new instructional offerings including the following:

1. New courses requested as part of a degree or certificate pro-
gram previously approved for the college by the ICCB,

2. Changes in existing approved degree or certificate curricula 
involving the addition of an option within a program such as 
a second major emphasis or specialization within the general 
scope of the curriculum,

3. Renewal of out-of-district course offerings in nondistrict 
territory within the state when initial approval for the exten-
sion center outside the district was given by the ICCB,

4. Special business and industrial development job training 
programs requested to meet an immediate local need when 
such offerings are for a specific limited time period, and

5. A curriculum at a college in a multi-college district if another 
college in that district has the curriculum previously ap-
proved by the ICCB, and there are no major capital, fiscal, 
statewide, or regional planning concerns.

The ICCB Office does have to approve each individual course 
before state funding can be provided for students in that course. The 
list of these approved courses, along with lists of approved curricula are 
maintained in the ICCB management information system, and 
computer printouts are available to any college or agency requesting
such information. The computer also compares each state aid claim with the approved course list and would reject state aid for unapproved courses.

classification of instructional programs

A part of the role of the Illinois Community College Board in program planning and coordination is to try to reduce unnecessary duplication and eliminate gaps in the educational services for the citizens of the state. This is particularly true for high-cost, low-enrollment career education programs (and also includes programs for which there appear to be low manpower needs) in order to obtain the most effective and efficient use of local and state tax dollars. To help achieve this end, the following classification system is used for the approval of new curriculum proposals for the public community colleges of Illinois:

District Program. A program which can be offered by each community college in Illinois if justified by local employer demand, student interest, and available resources in the district. A secretarial science curriculum would be an example of a district program.

Area Program. A program dependent upon the special needs of a certain geographical area of the state that is larger than the single community college district. A coal mining technology curriculum would be an example of an area program since it is only offered in those areas of the state where coal mining is a major industry. However, a college with such an area program must allow space for students from other sections of the state. Several community colleges in the area may offer the area program when definite needs for such multiple offerings can be demonstrated.

Regional Program. A program serving a larger section of the state, usually four or five community college districts, and so specialized that probably no more than one such program would be approved for each region of the state. A regional program must provide access for students from other community colleges in that region, not just for the students in the district offering the program. A dental hygiene curriculum would be an example of a regional program. Although the regional boundaries are flexible, they generally coincide with the ICCB planning regions and the Illinois Community College Trustee Association regional boundaries.

Statewide Program. A program so specialized that only one or two would be approved in the state. A petroleum technology curriculum would be an example of a statewide program. The college with such a program must allow space for students from all over the state.
evaluation of instructional offerings

The Illinois Community College Board is involved in program evaluation through (1) the state recognition process; (2) the self-study and consultation with the North Central Association of Colleges and Schools (the regional accrediting agency); (3) the evaluation visits by the Illinois Office of Education's Department of Adult, Vocational and Technical Education; (4) the student follow-up studies on both university transfer students and occupational graduates; (5) results of state licensing examinations; and (6) special studies and visits. In addition, the ICCB Office is working cooperatively with the Illinois Board of Higher Education to initiate a system of program review which would identify those programs with only marginal reasons for continued existence (due to low enrollment, few graduates, high cost, poor licensing examination results, or other such factors).

In accordance with statutory provisions, the ICCB grants recognition to those community colleges which meet the standards and criteria of the State Board. Only those community colleges which are recognized by the ICCB are eligible for state aid. The ICCB Office monitors the progress each college is making annually from documents submitted to the ICCB Office. Each college is visited by a team of community college officials and state staff for a recognition evaluation once every six years—or earlier if such action is needed.

Under current procedures, ICCB approval for a college to operate a given program is not withdrawn if a college should fail to meet recognition standards. However, the college would not be granted recognition, and it would not be eligible to receive state funds for operating the program until the deficiencies are resolved.

The ICCB staff participates in periodic visits by the Department of Adult, Vocational, and Technical Education to the colleges to evaluate DAVTE funded vocational and technical education programs and to determine whether or not these programs are being operated in compliance with state and federal regulations. DAVTE may withdraw state and federal funding if the programs do not comply.

The community colleges themselves also review and evaluate their instructional program offerings. The decision to defer offering a program or to withdraw a program from state approval currently rests with the local district board of trustees. The college notifies the ICCB Office when it officially withdraws an approved curriculum.

cooperative and contractual agreements

The Illinois Community College Board has eight different types of cooperative and contractual agreements designed to serve the
citizens of the state through the public community colleges. The first four types of cooperative/contractual agreements listed below require that the community college offering the program must have the ICCB approval to do so, while the last four types of cooperative/contractual agreements listed below do not require ICCB approval. The primary purpose of these cooperative/contractual agreements is to provide opportunities for all students to obtain the program of their choice, even when their home community college can not offer the curriculum in the regular instructional manner.

**Interdistrict Agreement.** A cooperative/contractual agreement between two or more community college districts where the sending college may receive approval for the unit of instruction (and a limited number of courses) to be offered on its own campus, but the major portion of the specialized course work will be taken by the student at the receiving college which usually has the facilities and staff to offer the specialized courses. The receiving college has the original approval for the total program, but the sending college may also award the certificate or degree (even though it did not offer all of the specialized courses in the major field of study) provided that it is identified as a cooperative program.

**Proprietary Agreement.** A contractual agreement between an Illinois public community college and a proprietary school to provide services for community college students. The student pays only the community college tuition and the community college collects state aid for all approved courses taught at the proprietary school.

**Consortium Agreement.** A contractual agreement between two or more community college districts (or between a community college district and other institution(s) of higher education) to offer a specialized instructional program. Each institution in the consortium may have its own unique program or offer parts of the total consortium program, but the ICCB approves a single program for all institutions involved in the consortium. The program must be cooperatively developed and evaluated by the institutions involved, but each college can award its own degree or certificate. Without such consortium arrangement, an individual college might not be able to afford a high cost program, may have insufficient enrollments to justify its own program, and may not benefit from special features of the consortium agreement.

**Interstate Agreement.** A contractual agreement between an Illinois public community college and an institution(s) outside the boundaries of the state of Illinois to provide educational services for Illinois residents. Such arrangements are already implemented with selected institutions in Iowa, Missouri, and Wisconsin. The student pays only the community college tuition and the community college
collects state aid for all approved courses taught at the out-of-state institution.

**Chargeback Agreement.** A statutory provision whereby a student from a district without a particular program may enroll in another community college district which does offer the program, and may have the out-of-district tuition costs paid by the home district.

**Out-of-District Extension.** An agreement between two community college districts for the offering of a unit of instruction or a portion of a unit of instruction in one district by another district.

**Access Agreement.** A contractual agreement between community college districts, making seats or spaces in one college available to students from the other community college(s) which do not have approval for the specific unit of instruction. The district offering the instruction may or may not charge the district sending the student(s) under the agreement.

**Dual/Shared Agreement.** A contractual agreement between community college districts making seats or spaces in certain specialized classes in one college available for students from the other community college(s). However, the general education and/or related instruction is usually offered at the home community college of the student. The student may be splitting the course-work between the two colleges each term, or may alternate terms at the two colleges.

All eight of these cooperative/contractual agreements listed above are currently in operation in the public community colleges, although not all colleges are participating in all eight arrangements. The interdistrict agreement and the chargeback arrangement are the most common cooperative programs in existence at the present time.

**summary**

State boards and agencies often have an important role in the planning and coordination of community college instructional programs. In some states, the state board is also the governing board for the community/junior colleges and has the responsibility for the establishment and management of the curriculum. In Illinois, the Illinois Community College Board and its staff are involved in the planning and coordination of instructional programs, often having a key role in curriculum development and approval. Nevertheless, the ICCB promotes local initiative and administration of instructional programs and views the state role as one of support for the local efforts. In addition, the ICCB encourages various cooperative and contractual agreements where appropriate in order to extend educational opportunities to all citizens in the state in the most effective, efficient, and economical manner.
references


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The growing need for career education for students who already have jobs can be accommodated.

serving part-time students through career education

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For a number of years community colleges have recognized the advantages of offering career programs for employed adults. Selected career programs with low development and maintenance costs have provided the colleges with needed revenues and minimal concern. The growth of these programs for the older, employed part-time student went almost unnoticed at first; but now the number of part-time students in career programs has so increased that the maintenance and promotion of this growth is a matter of priority.

At first only minor changes in scheduling and staffing were required to accommodate the new programs. But the rate and magnitude of institutional change has not been sufficient to meet the unique challenges presented by the students. To better understand the kind of institutional change that will ensure the future vitality of these programs, it is necessary to examine their origins and some of the problems they have encountered.

Law enforcement is an example of an older, sizeable career program that forced adjustments in the scheduling procedures of the community colleges. Law enforcement personnel in college career pro-
grams often worked shifts that were subject to periodic time changes, which did not synchronize with conventional class scheduling. One response to this was to schedule duplicate course sections, morning and evening, to be taught in some instances by the same faculty member. Duplicate sections solved the problem at the price of minor inconvenience to the college.

Career programs in fire protection posed a similar problem. The work schedules of fire protection students were often twenty-four-hour, rotating shifts; and again, duplicate sections were offered, but on successive days of the week. This at first increased costs, but the colleges then increased the use of part-time instructors, which reduced costs even where multiple sections were involved.

Part-time instructors in the fire protection programs often lacked the traditional qualifications of the full-time member of the community college faculty, because no four-year program in fire protection was available. Consequently, colleges were not required to add to the full-time faculty instructors who lacked the formal credentials of higher education. Fire protection programs in the late 1960s were thus atypical, but generally they received a level of attention from advisory committees and administrators sufficient to ensure an acceptable level of quality control.

In many rural and suburban parts of the country, fire protection is a volunteer activity. When community colleges offered fire protection programs in these areas, the programs were modified to such an extent that they bore many of the characteristics of continuing education or community service. Frequently attaching credit to a course offering was more an administrative device to secure state reimbursement than an attempt to meet the needs of those who took the courses. Little attention was given to continuity. Courses were offered because of their wide appeal; they were scheduled at times most convenient to the volunteers. Because of the large number of volunteers required to offset the lack of a paid fire department, the number of available students greatly expanded, and there was no need to schedule duplicate sections. Community colleges found these loosely organized and minimally supervised programs to be a significant revenue generating source of additional full-time student equivalents.

Another large program serves to highlight the problems and practices of career education programs for employed adults. The American Institute of Banking (AIB) has developed a highly structured program leading to certificates of achievement and recognition. In the beginning local chapters, under the leadership of a national organization, were encouraged to affiliate within the community colleges. The result was highly advantageous to both organizations. AIB instructors achieved status through their association with the college,
while students earned credit for work completed, a valuable asset to those who intended to pursue the baccalaureate degree. The college gained a career program and a significant number of part-time students without having to employ new full-time instructors. Only the most modest demands were made on the administrative staff. Program quality and responsiveness were ensured by the affiliation requirements of local AIR chapters and by their continued monitoring of the program. Having on hand a pool of experienced adjunct instructors further enhanced the acceptability of these programs to the community colleges.

A final program providing insight into current practice is real estate. Usually states have real estate licensing requirements that can be satisfied by an examination taken on completion of six to nine credit hours of instruction or its equivalent. Real estate sales, often a part-time occupation with large employee turnover, ensures a continuing need for entry-level preparation. While instruction is usually available from private sources, community colleges, through public subsidy, can offer these courses at a low cost with the need clearly at the entry level. However, from the standpoint of state reimbursement, it makes good sense to make real estate a full-fledged career program. Advanced courses can be scheduled sparingly, since it is understood that most who enroll are interested in meeting the basic licensing requirement. The result is a high-demand, low-cost program, with little attention given to sequence or continuity, since the goal is not perceived to be the certificate or the associate degree.

The four examples presented provide some feeling for the current problems and practices in career programming for part-time students. Law enforcement programs helped to establish the practice of structuring career programs to the needs of part-time, employed students. The use of well prepared faculty, the attention given to scheduling and standards, and the high rate of completion demonstrated that such programs would not suffer by comparison to programs organized around the needs of preservice, full-time students.

Fire protection programs fostered the use of exclusively part-time faculty and acknowledged the need to complete a technical course of instruction without the accompanying general education requirement for the associate degree. Fire fighters in general, and volunteers in particular, were less interested in credit than in competence; consequently, they were less willing to enroll in English, mathematics, and social science courses.

The AIR banking program illustrates the ease with which credit hours can be generated by the community colleges' assuming responsibility for well-conceived, ongoing programs. In view of the quality of the original AIR offerings, it would seem that programs for part-time
students taught by part-time faculty members can, with minimal supervision, achieve a level of excellence equal to that of the regular, traditional programs.

Real estate programs popularized the practice of concentrating on high-demand, entry-level courses leading to very low completion rates for degree programs—with no need to schedule, in a recognizable sequence, the advanced courses required for program completion.

Not all community colleges have subscribed to the practices identified here, but decreased enrollment and public resistance to increased taxes have placed pressures on most community colleges to move in these directions.

To complicate further the problems of community colleges, there exists in many institutions a surplus of full-time instructors in traditional disciplines which are in a state of declining demand. To compensate for the cost where a full-time faculty is not fully utilized, colleges concentrate on offering part-time students low-cost programs taught exclusively by part-time instructors (Marsh and Lamb, 1975, pp. 7-8). Many states reimburse career program full-time student equivalents at a level higher than that for traditional academic courses, and because many states do not reimburse for any continuing education, the temptation for the colleges is to qualify as many courses as possible under the career education column.

Since most of the practices cited above are not improper, caution must be exercised when criticizing community colleges for attempting to compensate for inadequate funding levels. However, this does not justify failure to examine the impact on students of these financially motivated practices.

One dangerous form of community college orthodoxy is to believe that low and declining completion rates for part-time students in career programs signify merely an absence of interest in certificates and degrees (Hoenninger and Black, 1973). This may be true, but until better evidence is presented, this sounds suspiciously similar to the reason that was given for why the open door was, for many students, the revolving door. Before community colleges were prodded into studying the needs of disadvantaged students and designing programs to meet these needs, the prevailing explanation for the high attrition rate was that students were coming to college with limited objectives, and that once these objectives were achieved, in a semester or so, the student left. Further study failed to substantiate this view, and a major curriculum change resulted. The same situation may obtain in the case of the part-time students in career programs. The students' interest in further education may be present without the colleges' awareness of institutional obstacles to further achievement.

What should community colleges adopt as a minimum require-
ment if they wish to demonstrate that their concern for part-time students in career programs is not merely to generate maximum revenues at lowest costs? A first step would be to identify those career programs where a significant ratio of the total enrollment consists of part-time, employed, adult students. As strange as it may seem, community colleges in some states have little information on the status of students enrolled in courses certified for vocational reimbursements. In Arizona reimbursement is on a course-by-course basis, with the enrollment in each course aggregated into full-time student equivalents. Since records are designed to facilitate application for state reimbursement, some colleges cannot distinguish between a student who is pursuing a specific career program on a full-time basis and one who is pursuing the same program on a part-time basis or is interested only in completing a particular course.

A second step would be to identify more carefully the needs and interests of part-time students, remembering that the student's perception of what is possible may be obscured by what the college has promoted. It should become common practice to survey the student population on educational intent. Though younger students often lack a clear perception of their goals, older students may know with some certainty whether their intention is to take two or three entry-level courses or to continue on to the certificate or degree level.

If a program has been operating for a period of time, follow-up studies on former students who have completed basic courses in the past three to five years should be routine. Institutions interested in expanding a program will find it useful to study student interest in enrolling where special arrangements have been initiated to assist part-time students in earning a certificate or degree.

Concurrently with the needs assessment of existing and potential part-time students, community colleges need to conduct an inventory of institutional practices in relation to career programs which enroll substantial numbers of part-time students. The following list of questions, while not exhaustive, is representative of areas that should be examined:

1. Does the college catalog identify those career programs where a commitment has been made to assist part-time students in earning a certificate or degree? Does it give specific instructions to part-time students concerning the scheduling of courses, advising, financial aid, and other services?

2. Does the system of orientation and advising take into consideration the needs of part-time students? Are students with degree or certificate intentions identified and assigned advisers? Do part-time students receive adequate assistance in developing their programs of study?
3. Does the course schedule specifically identify a certificate or degree sequence for part-time students? Does the sequence begin at regular intervals? Is an effort made to publicize the cycle to encourage students with certificate or degree intentions to begin?

4. Are advanced courses offered at times when they can be taken conveniently by part-time, employed, adult students? Does the institution have a commitment to offer advanced courses in all programs?

5. Are support services, such as counseling, access to the learning resources center, financial aid, and tutoring, as readily available at convenient times to part-time students as they are to full-time students?

6. Does the institution have as one of its instructional development priorities the adaptation of instruction for part-time students? Competency-based instruction, the use of challenge examinations for awarding academic credit, and open entry/open exit programs are examples of instructional practices that the institution committed to effective instruction of part-time career program students should have under study.

For many community colleges, a comparison of the needs of part-time students in career programs with institutional practices is likely to reveal serious discrepancies. The growth of programs for part-time students as previously described has been almost incidental to the perceived priorities of community colleges. The increased importance of part-time students and the possibility that they may become the mainstay of community colleges in the not-too-distant future must force a reappraisal of the level of attention given to the creation of new career programs as well as to the modification of those already in existence (Wenrich, 1977, pp. 31-32). It is evident that many of the programs designed by community colleges for the part-time, adult student may be liabilities rather than assets when community colleges compete for tax dollars. Astrology, yoga, bridge, and square dancing are unlikely candidates for support from state legislators. However, career education has been a priority since the mid-1960s, and it seems likely to remain so in the foreseeable future.

The community college will benefit from an emphasis on career education and the interests of part-time students only if it can demonstrate a commitment to meeting needs through quality programs. To the extent that institutions use part-time students to support activities and programs for which there is a diminishing demand, they will emulate the dinosaur, with totally predictable results.

Community colleges need to review existing practices in the light of the emerging importance of part-time students. In those in-
stitutions which adapt and flourish, most if not all of the following will take place:

1. Information on the characteristics and objectives of students enrolled in career programs will be routinely available.

2. Close relationships will be maintained with employers, unions, the employment service, worker training and development agencies, state vocational and technical education agencies, and other similar agencies, through active job cluster advisory committees.

3. Program design will reflect the needs of part-time students. Instructions will be published to assist part-time students in completing certificate or degree programs. Advanced courses will be offered in a sequence for part-time students as they now are offered for full-time students.

4. Response time for starting new training programs will be brief—certainly no more than sixty to ninety days. Program emphasis will be at the certificate rather than the degree level. Programs will be offered when they are needed, suspended when they are not.

5. For each degree program offered on a continuing basis, a certificate option of twenty-four to thirty semester hours will be established for students interested only in technical competence. For certificate programs offered on an intermittent or continuing basis, a general education sequence will be defined for those students who wish to earn an associate degree.

6. For each degree or certificate program offered, a competent faculty coordinator with expertise in the vocational or technical field involved will be employed by the college to provide support in the development of curriculum, to coordinate course offerings, to ensure continuity, and to assist in program administration and evaluation. Faculty coordinators will at least be on a prorated full-time contract, although the conditions of their employment may resemble those for staff employed under the terms of a grant. If a program is intermittent, the institution should not be obligated continually to find something for a full-time faculty member to do. At the same time, the ratio of income generated by the program to resources expended for instruction and instructional support should dispel any suspicion of exploitation of students.

7. Student services, such as orientation, advising, financial assistance, access to learning resources, and tutoring, will be as adequate for part-time students as they are for full-time students.
8. The college will support instructional development by employing full- and part-time faculty members to develop individualized, competency-based instructional units; to develop and administer systems for incorporating life experience; and to design and implement time-free and space-free instructional systems.

9. Evaluation of outcomes will be continuous. The college will know why students fail to complete certificates or programs and will be engaged actively in efforts to remedy those circumstances which are under their control.

It is obvious that most of the above will mean a higher cost per credit hour of student instruction. It will also mean a lower faculty-student ratio. Serving part-time career program students by adapting schedules and instructional methodology may be substantially more expensive than enrolling as many part-time students as possible in existing programs and using the revenues generated to offset declining tax support.

It can be argued, however, that the use of part-time students to finance the maintenance or expansion of programs designed for a different clientele is very shortsighted and self-defeating. If the major determinant of the future success of the community college is to be the part-time, adult student, then significant resources must be provided for the development of appropriate programs and services. Community colleges are not the only institutions interested in the part-time, adult student. A shoddy job of serving this clientele would encourage the emergence of alternatives to the community college. The alienation of an emerging clientele, to finance the maintenance of unnecessary programs for a diminishing clientele, can form no adequate part of any long-range strategy.

Community colleges have proven their ability to serve such diverse groups as law enforcement officers, firefighters, bankers, and realtors. When programs for these groups were designed, however, they were peripheral to the main institutional focus. If part-time students in career programs are to become the rule rather than the exception a reappraisal of the methods of serving them will be in order. Communities will then finance programs purposely designed to meet critical social needs. Putting our citizens to work or helping them to improve their opportunities for advancement if done well need not be financed by practices which limit opportunities or incorporate the possibilities of serious compromises with quality.

references


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Career programs can be prepared in association with employers.

speaking with employers

sigurd rislov

For nearly thirty years, community college leaders have talked and written about the special objectives of community colleges which distinguish them from conventional colleges or universities. One of the articles of faith for all true believers is that the community college will provide whatever kind of educational services their community needs. On that, at least, there is substantial agreement by the faithful.

Disagreement occurs when attempts are made to specify those needs. Disagreement also occurs as to who are the proper persons to decide what the community needs. Clearly, the two are related.

Academicians usually believe that a liberal education is something everyone needs. After all, they argue, it is what made them what they are. (Non-academicians often consider this as damaging evidence.) Consequently, they (the academicians) are the persons who are endowed with the wisdom and maturity to determine educational needs. The procedure for doing this is to establish curricular committees, write a few learned articles on curriculum construction, and proceed to design the combination of learning experiences without which a person will have a warped personality and will surely fail to fulfill his destiny in life.

This kind of procedure does make some sense for students whom genetic programming (or whatever) designee for at least a quasi-intellectual life. But most of the people in the typical community college will view this as pious nonsense. Their life's objectives are set out-

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side of academe. If they use the community college, it is because they think, rightly or wrongly, that the college may help them to achieve more of their objectives.

In order for the community college to respond to that demand, some reliable guide to such objectives is necessary. What follows in this article is a description of a procedure that has been successful in developing some of the community college curricula which respond to such educational needs.

The first step will be for the president of the community college to become familiar with his community. He can do this in many ways, such as noting the kinds and sizes of its businesses, industries, and agencies. Having membership in some key organizations to which top management belongs is useful. Visiting the industries helps, as does studying the available demographic and economic data.

Making the original contacts with the heads of industry is something most community college presidents no doubt do well. (Otherwise they probably would not have become presidents.) What happens from then on is what makes the difference. Many a president in a speech to the Rotary or its equivalent will assure the community leaders that the college will review the educational needs of their respective establishments—and then leave it to some subordinate to try to do something about it. The result is usually some training classes for apprentices, some program in the health field, some business courses, and some course for recreational and computer personnel and adult education.

Industries, in spite of community colleges, still do most of their own educating. Until their leaders can believe that the community college will perform this function better than the industries themselves, the community college will not be entrusted with that responsibility.

Obtaining the confidence of the community leaders will be the task of the college president. If the industrial leaders can have confidence in him, they will have confidence in the community college (initially, at least). If they do not have confidence in the president, other members of the college will have trouble being heard.

Assuming such confidence is established, the next step will be for the president to talk in general terms with the top management of those firms most likely to benefit from the community college. First of all he will have to ascertain what the college can do for the firm. If the president and staff want real involvement, they must be willing to accept management's definition of educational needs.

Once such preliminary investigations have been made, a meeting can be held between the president's delegates responsible for the college's implementation and the delegates from management who will be responsible for the industry's participation.
At this meeting a sequence of steps can be laid out for the planners. The latter will need to examine precisely what the possibilities are, who will be the clientele, how many participants will there be, why will they participate, and what kinds of feasibility studies need to be made.

When these and similar activities are completed, the president and top management meet together to hear the reports from their planners. If it is deemed desirable to proceed in light of the expected requirements and possibilities, the next step will be to determine the content of the program. If the community college is to serve the educational needs of the industries, the latter will determine what the content of the program will be. The function of college representatives will be to determine jointly with industrial representatives what that content entails. They will determine the amount of time for each topic or objective, materials and equipment required, space needed, evaluative procedures to be used, how the program will be monitored, and so on.

This can be quite revealing to industrial representatives. For example, in one case familiar to the author a program was being developed to train people in the care and maintenance of automatic instruments used in a certain industry. The industrial representatives meeting with their counterparts from the college were writing on a chalk board a list of the topics they thought a person should master in order to be really competent. The industrial representatives were a physicist and some engineers. When the list was complete, the next step was to determine how long it would take to cover each of the subtopics involved in each of the topics. After this was done, the time was summed up—and instead of a two year program it totalled four and a half years. The industrial representatives were then asked what should be eliminated in order to reduce the time to two years.

This had at least two consequences. One was that the final program included what the representatives of industry most wanted. A second consequence was that the industrial representatives realized they could not expect a person to acquire four and a half years of training in two years. They knew what they could expect—as well as what they could not expect—from someone who had completed the program.

Once management discovers that the college will actually do the kind of thing they want, they have a real stake in the program’s success. They can do this in many ways such as reviewing facilities and equipment, helping with staffing, evaluation, employment of graduates, and so on. Staffing the program is especially important. If the president employs persons known to be respected and recommended by the industrial management, the latter then shares responsibility for
the program's success in another telling way. Confidence in the teaching staff is essential to management's continuing confidence in the president.

Recruiting in some instances can be done entirely by the industry. In other instances, industrial representatives will help. If they feel that it is their program, they will want it to succeed.

This also applies to monitoring the program. Although occupational programs have advisory committees, these committees cannot really monitor a program. It is useful to have a person in industry designated by the industry as a contact for whoever is monitoring the program for the college. In any monitored procedure it is assumed that information is systematically gathered pertaining to student recruiting and admissions, supplies and equipment, teaching, program completion, work performance, and so on.

With this and other information such changes can be made in the program from time to time as warranted. Industrial needs will change, topics may need to be revised, and so on. Evaluation is part of this normal procedure, and requires participation by the industrial representatives.

One of the annoyances for the developer of these kinds of programs is the general education usually required for an Associate of Applied Arts or some such degree. Regional accrediting agencies, not to mention college curriculum committees, will insert the general education requirement. In a society whose productive forces and productive relations are the consequences of advanced technologies it might make more sense to require all academic majors to be competent in at least one technology. However can they expect to even sense what shapes western society? In the meantime, one way to keep the program the way industry wants it is to give certificates of completion in those instances when the program is shorter than two years or when its objectives as determined by industry do not include general education. For those students, if any, who desire a degree, supplementary general education can be arranged.

Many community college presidents and curriculum committees feel that to actually develop and run an educational program the way industrial management wants is to abrogate the college's responsibility to educate the whole person. Consequently, they design programs to satisfy the needs of the curriculum committee members and the president rather than those of the community. There is no harm in that. However, community college possibilities extend much further if the college responds to community educational needs as described.

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In the setting of goals, problems of conflicting input sources and potential process pitfalls need to be understood, as well as criteria for clear and effective statements.

goals: criteria, input, and process

richard l. rinehart

Many of our more serious problems, conflicts, and debates in higher education stem from a failure to develop, communicate, and agree on clear curriculum goals. Pie-in-the-sky statements, ambiguous phrasing, and overly generalized goals allow for different interpretations and disregard or ignorance of implications. Glossing over this phase of curriculum shaping usually leads to conflicting directions and nonproductive arguments about accountability. It may well result in wasting time and money because of student-faculty-administration-staff-community misunderstandings.

The term, goals in this article refers to final or resultant learnings and the capability of those completing learning programs — not to the various types of objectives as these are generally defined in instructional development. It is here assumed that effective defining and setting of goals is much more than the writing of a three-sentence explanation of a course or curriculum title.

criteria for goal statements

Why develop goals? Following are a few reasons:
• Goals are needed to clearly describe the curriculum or course to potential students, to advisers and all concerned faculty members, to
those who must provide resources and support, and to potential employers of the learner.

- Well-understood goals enable fair accountability, and lead to valid student-faculty-administration agreements.
- Evaluation is better conducted if based on well defined goals that include references to criteria measurement feasibility, and relative importance.
- By explaining the rationale for choices, the goal setting process can help resolve conflicting desires and opinions among the individuals involved.

In order to accomplish these purposes, an acceptable goal statement will do the following:

- Identify or describe the target population for the learning.
- Be based upon appropriate task analyses, critical incident analyses, or other referent studies.
- Include appropriate references to prior learning, to characteristics of learners, and to the overall environment. It is inefficient to spend time teaching things that already have been learned by most of the students, or attempting to teach concepts where they lack necessary prior skills. A clear understanding of the group's prior achievement is necessary. The environment consists of equipment, facilities, and financial resources, as well as scheduling patterns and grading or evaluation procedures.
- Be clear enough to communicate the same information to people of diverse background, education, vocabulary, and bias.
- Be detailed enough to be distinguishable from statements of similar goals, and to be able to convey any unique factors that affect others' decision making.
- Include alternative measurements of accomplishment of the stated goal.
- Have reference to measurement feasibility (for example, time delay, cost of measuring, validity of measurements).
- Include a rationale, that is, a statement of the importance of the goal and degree of accomplishment, to enable rankings of goals, and justification for related costs.

Even though college goals statements that meet the above criteria are rarely seen, perpetuating simplistic statements is not justifiable. The goals statements for new major programs usually meet the criteria but are often inadequately communicated to the potential students and faculty. The effort to meet these criteria (which would involve steps that can be labeled goal analyses in the literature) will be beneficial even when the criteria cannot be fully met. (It is true, however, that forcing a goal statement to meet criteria may result in dam-
aging the original intent.) The following two examples may help to illustrate the criteria:

**Surveying Law.**

This is a two-credit elective course within the civil technology program for full- and part-time students interested in the topic or wishing to specialize in surveying. Satisfaction of basic courses in plane and geodetic surveying, or equivalent knowledge in those fields, is prerequisite.

The course will ensure that the student understand the principles of common law, precedents, and current statutory law related to property rights and property line establishment, specifically those pertaining to the relative strengths of conflicting property descriptions, the importance and meaning of the historical development of public land systems, and the appropriate measurement precision for different cadastral surveys. The understanding of these principles is essential to anyone in a responsible position related to general surveying.

Accomplishment of the goals will be determined by written tests based on objectives developed for the course. The tests will include some of the questions and criteria used for licensing land surveyors, and it is expected that successful completion of the course will enable a person to pass the legal portion of such examinations.

In this example, the prerequisite signifies that the course is not intended for pre-law or liberal arts students. The technical vocabulary may not be clear to everyone, but it was felt that the primary audience of faculty and students in civil technology would understand it. By not making any specific statement about special equipment, facilities, cost of teaching, or scheduling needs, the administration can assume that the course will be taught as a regular lecture class, and that costs will be normal. It is not necessary to include a reference to the task analysis that leads to the goal.

**Career Concepts: Production, Commerce, Services.**

This is a set of three courses for persons involved in career education, career development consulting, and counseling. While required for the degree in career information, enrollment is open to professional practitioners in schools, colleges, and corporate human resource development divisions. The courses are based on studies indicating that a lack of work experience outside the academic world handicaps one in helping others to develop realistic career plans.

The *production* course concentrates on manufacturing, construction, mining, skilled trades, design, processing, and engineering fields. *Commerce* includes general business, banking and finance, sales, advertising, marketing, communications, hospitality and tourism, and retail and wholesale distribution. *Services* covers allied health
careers, education, law, criminal justice, public safety careers, and civil service or government as a type of employer.

Each course is designed to present a realistic view of the several types of employers, systems of career opportunities, personnel policies, employer/employee relationships, required training or educational levels, manpower projections, in-service education and training opportunities, competitive relationships, and civic and humanitarian satisfaction.

The courses are designed for persons who have an understanding of the basic concepts of career education and of career decision-making theory but little firsthand knowledge of or experience in work outside of schools and colleges.

On completion of the courses the individual should have assimilated facts and feelings about work as perceived by persons in the several employing organizations. The individual will also be able to evaluate the validity of published information on the various careers, to develop methods for continuing to find and evaluate future information, and to understand how classification and promotion systems vary among employing organizations.

Since the goal of this program is internalized understanding as well as a sampling of facts on career characteristics, measurement of accomplishment is difficult. The goal is important, however; therefore, the attempt to reach it is a requirement for the degree.

Indicators of accomplishment will be the satisfaction of specific objectives developed for each course, individual reports on shadowing and in interviews with employees (based on criteria supplied in the course), and full participation in discussions. Field trips and guest speakers will be used in addition to individual reports and text material.

This goal statement for a set of three courses points out the expectation of additional expenses for trips and speakers. Information will be elaborated on as needed for fiscal and legal considerations in a course approval process, and for student considerations in planning required trips. This example is included to illustrate an effort in the difficult area of learning in the affective domain, and where the measurement of assumed prior learning is complex. Since the potential students would have varying degrees of prior knowledge, a test or documentation of experiences would be desirable for efficiency. The goal statement is an effort to help individuals make initial decisions regarding their need for the course. Selected tests may then help to make decisions about particular parts of the set. An overall test for the courses was deemed to be impractical in this example. The goal statement does not fully meet the listed criteria. It was felt that further specificity or measurability would endanger the intent of the funda-
mental goal. Course objectives can still be developed to approach an ideal plan.

sources of goal information

Since goal setting usually involves the application of personal judgment to an incomplete set of facts, the individuals involved rarely agree at the beginning of the process. They probably agree only on statements that are generalized to the point of uselessness. The process of resolving differences can be helped by an understanding of the merits of sources of goal information. The following comments on sources are offered to help this understanding.

Advisory Committees. Advisory committees can provide a greater breadth of knowledge and experience, support for resultant programs, an awareness of current needs, and objectivity. Possible shortcomings are a superficial commitment to the program, a failure to study the issues, a tendency to make decisions rather than give advice, dominance by individuals with vested interests, confusion between membership-as-an-honor and full participation in deliberations, and an overemphasis of specialized employer needs.

College Committees. College committees can provide an understanding of general education components and of administrative or college resource constraints. Possible shortcomings are a tendency to protect empires or domains, the misunderstanding of the committee's role in goal setting, and a tendency to confuse goals with instructional strategies.

Field Consultants. Field consultants can provide highly specialized knowledge, the status or prestige that will persuade others to accept the goal, and objectivity. Lack of knowledge about the college or the program is a possible shortcoming.

Individual Faculty Members. Faculty members can provide the combination of discipline knowledge and teaching competency necessary to evaluate the feasibility of goal accomplishment, as well as the ability to synthesize opposing points of view. Possible shortcomings are a necessarily limited knowledge, the tendency to overemphasize one's own experience, the promotion of a vested interest, and a difficulty in overcoming semantic problems in articulating the goal.

Instructional Consultants. Instructional consultants can provide professional competence in assisting in the formulation of goal statements, as well as a more extensive understanding of the relationship of the goal to objective formulation-evaluation-strategy selection-rationale systems. Possible shortcomings are a misunderstanding of the essence of the desired goal, and a reliance on one's own inadequate knowledge of basic fields.
Societal Groups. Government agencies on education, accrediting organizations, and society-at-large can provide knowledge of expectations that must be met, as well as a synthesis of a large number of opinions. Possible shortcomings are a lack of knowledge of one particular situation, and a tendency to rigidity.

Students or Alumni. Students or alumni can provide knowledge of student characteristics and desires, an understanding of motivations for learning, and a consumer view on the salability of goals. Possible shortcomings are a lack of fundamental knowledge or of sophistication or of the ability to foresee needed competencies, and a tendency to be unrealistic.

It is here implied that consultants, advisory committees, and other sources may serve in different roles from one situation to another. Problems arise, however, when there is confusion over the role desired for a particular situation. More thorough and substantive guidance can be found in the literature under the headings of task analyses, needs assessment, planning (also business planning), and interpersonal communications or relations.

process considerations

The most common error is failure to secure all the available information before beginning to define a goal. Good management skills require the substitution of available knowledge for unchecked assumptions, recognizing at the same time that all desired information may not be readily available.

The need to have real support for the resultant goals (from individuals who have had conflicting positions during the process) affects the decision-making process. An understanding of group dynamics and conference techniques will be needed to arrange procedures appropriate to the given situation.

Effective goals should not be too trivial, universal, or unrealistic. The time and effort involved in goal formation (as in other decision making) should be proportionate to the importance and magnitude of the goal. It is just as inefficient to spend too little energy on a major goal as it is to spend too much on a minor goal.

The tendency to misuse group activities has resulted in the association of committee meetings with wasted time. There is ample evidence that properly planned group activities do really come up with better solutions to complex problems such as goal setting.

Other problems come from forgetting that goals will subsequently be reviewed, evaluated, and revised. As in any good planning function, the process should ensure that evaluations lead to successive refinements.
Goal formation in a system of instructional development deserves a major emphasis. Days carefully spent on goals will save weeks of time later on in designing objectives, selecting instructional strategies, evaluating, and general planning. A clear statement of goals will enable students to select the right courses and programs. It will help to avoid many emotional discussions of curricula. It will improve public relations.

Design in curriculum planning, as in architecture, includes a clear and complete definition of goals. Interesting structures sometimes result from approaches deferring the goal formation, but those can be a work neither of art nor of science—until the goal is identified at some point in the process. The sooner a goal is identified, the more will time and energy be saved for the designer, the artist, or the responsible faculty member.

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The community college has another opportunity
to make good on its stated purpose
of offering general education.

The title conveys the central message of this article: the community
college once again has an opportunity to make good on its stated pur-
pose of offering general education. But can it do so? Does it have the
ability? And will it?

The casual observer of the higher education scene would sur-
mise that general education is about to enter a new era, that the pen-
dulum of educational change is, after more than twenty years, begin-
n ing a long swing toward general education. Certainly the signs are
there: there have been more articles on general education written in
the last three years than in the preceding ten; and general education is
now appearing in conference titles with consistent regularity. Unfor-
unately, despite the attention, being selected as a topic for articles and
conferences does not ensure adoption or change—witness the concern
for management by objectives in the late 1960s and early 1970s, the
instructional television blitzkrieg of the 1960s, or the importance
placed on competency-based education today.

The arguments in favor of some form of general education have
a long history. John Stuart Mill put it well when he said, more than a
hundred years ago: "It should be our aim in learning, not merely to
know the one thing which is to be our principal occupation, as well as it can be known, but to do this and also to know something of all the great subjects of human interest" (1967, pp. 7-8). The idea that general education affords breadth of knowledge has been the basis for undergraduate curriculum in most colleges.

The two-year community or junior colleges also have been concerned with general education. Between 1940 and 1966 several surveys of the status of general education were made. They, perhaps better than any other source, trace the efforts of the community college in general education.

One of the earliest studies was made by the California State Committee on Junior Colleges in 1939-1940 (Tyler and McLaughlin, 1941). After reviewing twenty-six programs, it reported that there was interest and a few good programs but no great understanding by administrators as to just what general education is; it also failed to find a single pattern of general education or much attempt at evaluating its effectiveness.

James W. Reynolds (1944), in a study of 200 colleges, made the first national assessment of general education. While he complimented the programs of several colleges, he found that most colleges fell short in providing an adequate program. Like the California committee, he attributed much of the blame to a lack of leadership in the colleges.

Eight years later, B. Lamar Johnson had surveyed general education as early as the 1950s. In summarizing the findings of his later study of California community colleges (1952), he reported that while much had been done in the years following the first study, much remained to be done. In particular, he mentioned the need for improved articulation with high schools; increased autonomy to establish general education programs based on student needs and interests rather than on transfer requirements of four-year colleges; recognition of the unique needs of a growing number of adult and women students; increased attention to the varying characteristics of students; and university training of general education teachers rather than teachers of narrow specialties.

Subsequent to Johnson's study, McAdoo (1960) evaluated the progress of seventy-five colleges from 1950 to 1960, summarizing his findings by saying that little had been accomplished in the past decade.

Later two different authors following similar methods found conflicting evidence of progress. Thornton (1966) sampled the catalogues of forty public junior colleges for general education requirements. He concluded that while there were still great inadequacies in general education programs, more colleges were making at least minimal provisions for general education. In a similar study of sixty cata-
logues, Zimmerman (1966) found that although there were several exemplary programs, many institutions had yet to even define general education goals.

Despite the general finding of more talk than action in the community college world, there were enough encouraging signs that even the most pessimistic observer would agree that by the mid-1950s enough colleges were seriously reconsidering their offerings to cause optimism. However, in 1957 the nation's pride was wounded when Russia's first sputnik was launched. Suddenly there was no time to debate the undergraduate curriculum, as all efforts and resources were focused on upgrading the mathematics and science programs. Then, some five years after sputnik, as a few brave individuals dared again to suggest a need to consider general education, the full impact of the postwar baby boom hit, and administrators were too busy dealing with building new campuses or buildings and recruiting faculty members to give much attention to what was being taught. However, the middle and late 1960s did usher in a period of increased concern about how courses were being taught. Although scores of articles published from 1960 to 1974 in the Community and Junior College Journal focused on the need to improve instruction, only a handful addressed themselves to the content of general education.

During the period from 1960 to the present, the reexamination of general education, an important but not urgent matter, was postponed time and again as all attention was focused on the important and urgent business of establishing, staffing, building and equipping enough colleges to meet the needs of a postwar baby boom; operationalizing an open door philosophy; meeting the first demands of accountability; coping with the pressures for increased emphasis on occupational education; negotiating with faculty and students who were insisting on increased participation in decision making; attempting to establish management information systems necessitated by the data requests of newly created state agencies and boards; emphasizing the word community rather than the word college, and expanding the concepts of community services; developing programs for a new generation of nontraditional students; and learning how to cope with the uncertainties of the steady state and the new challenges posed by collective bargaining. Thus it is no surprise that this era saw no new major thrusts in general education, or that most colleges succumbed to the problem-free advantages of the distribution system.

The current situation is perhaps best illustrated by the results of
a recently completed national study of a stratified, random sample (size, region) of 254 public community college deans of instruction. This study concerned the following: dominant curricular approaches involved in past and present general education programs; plans for the future; and perceived obstacles to change (Hammons and Ward, 1978). Responses were analyzed to determine regional, size, or age differences. Major findings of the study, based on a return of 68 percent, were as follows:

- 87 percent of all community colleges offer a general education program.
- Slightly over 50 percent of the colleges offering a general education program require all students to participate.
- A majority of the colleges include some course work from the following areas in their program: communications (94 percent), arts and humanities (85 percent), mathematics (82 percent), natural sciences (86 percent), health, physical and family education (67 percent), and social sciences (94 percent). However, counseling and guidance courses are included by slightly less than half of the colleges (48 percent).
- Courses selected from restricted lists, taught from a singular disciplinary point of view and subject centered, was the most popular approach utilized by community colleges for every curricular area. Other approaches were student selection from traditional survey courses, required subject-centered discipline oriented courses and then electives chosen from single disciplinary, topic based, courses. The deans indicated that these were essentially the approaches used by the colleges in the past.
- There is a significant discrepancy between what colleges are doing and what deans of instruction would like them to do, with the majority of the deans preferring topical, multidisciplinary, student-centered courses. This discrepancy is greatest in the communications area; health, family, and physical education courses exhibit the least desire for change.
- There are no significant differences in approaches in various regions of the country.
- Larger colleges (over 5,000 students) and smaller colleges (under 1,000 students) tend to be more traditional in their approach than do colleges of intermediate size.
- Colleges less than fourteen years old are more likely to use non-traditional approaches.
- The views of deans of instruction do not appear to influence the nature of general education. Roughly one third of the deans surveyed feel that general education on their campus is quite different from what they would prefer.
The deans are equally divided with respect to their views on whether general education on the national scene will receive increased emphasis, about the same emphasis, or decreased emphasis.

Over 43 percent of the deans feel there should be more interest in general education.

Most deans (54 percent) feel that no change will occur on their own campuses; some deans (15 percent) predict a decreased emphasis on general education.

Major barriers to change, according to the deans, are faculty resistance, difficulty of organizing a new approach, transfer of credit, inability to recruit specially trained faculty, and difficulty of locating appropriate instructional materials.

Judging by the deans' responses, it would seem that the future of general education is rather bleak. However, the jury is still deliberating.

forces against general education

Despite the increased attention presently given to general education in the mass media, the future of general education in the community college will not be determined by the debates of writers and speakers, but by the results of the struggle between forces for and against general education on each campus. An examination of these forces, a force field analysis, is a necessary first step in any attempt to predict the future of general education. At present the major restraining forces appear to be the following:

Definitional Problems. A necessary first step in any serious discussion of general education is to define the term. However, in all too many instances, the definition becomes the issue, and college staff members, unable to agree on what it is they need to change, simply lose interest.

Faculty Resistance. This item was the single largest obstacle identified by the deans in the author's recent study of general education. Even a cursory examination reveals a number of significant reasons for faculty resistance. To begin with, few if any faculty members have ever experienced a "true" general education course, so they have no frame of reference; their graduate school experience has not prepared them to teach in the broad manner needed of teachers in general education; they are concerned that ties with their discipline specialty will be loosened; they are aware that a tremendous investment in preparation time will be required; and finally, they fear that the addition of a strong general education core to be taken by all students will result in an enrollment drop in some courses and a subsequent reduction in staff.
Lack of Administrative Support. Administrative action, whether to advocate general education, to establish a committee to study the topic, or to merely broach the subject in a faculty meeting, is presently lacking. Yet, without administrative initiative, there is little reason to expect (especially in view of the factors mentioned above) that faculty members will be willing to reexamine current practices.

Student Apathy. If one were to visualize the forces for and against general education as roughly equal weights on opposite ends of a seesaw, that balance would be quickly upset by student reaction—if they were motivated. However, since they do not take an active position for general education they in fact argue for a continuation of the status quo.

Bureaucratic Red Tape. Not so many years ago college presidents could boast of the rapidity with which their institutions could respond to the need for change. To illustrate they cited programs started with a handshake, or course changes made simply by editing catalogue copy. However, this kind of immediate responsiveness has disappeared in all but a few colleges. In its place are institutional and state forms and procedures calling for multi-committee review, governing board action, state board review, and so forth—all of which consumes time and tends to retard change. As one faculty member put it, "It's just not worth the effort."

Competition for Students. In an era of growth, faculty committees were quite willing to approve requests by colleagues who presented logical arguments for adding courses or even modifying graduation requirements. There were plenty of students for everyone. However, with today's limited supply of students there is a tendency for faculty members to be quite suspicious of any change, examining it first from the perspective of its possible impact on their future and then on its merits.

Lack of Demonstrated Value. Due to a paucity of research supporting its claims, general education must rest its case on proposed merits and not on verifiable research—which is an interesting chicken or egg situation, since without working models there can be no research.

The "Education for Each" Idea. In the past two to three years, largely due to the writing and speeches of K. P. Cross (1976), the terms education for all and education for each have become part of the higher education vocabulary. Unfortunately, required general education courses are quite likely to be thought of as being in direct opposition to the currently popular notion of education for each.

Lack of Models. The move for instructional improvement in the late 1960s succeeded in part because of the availability of and publicity given to numerous islands of innovation. Everyone had heard of the
Oakland's, Miami-Dade's, Orange Coast's, and St. Louis', and visits to see them in operation were part of any college's effort to change. However, today there are few working models of general education, and these are not well known.

Back to Basics. Growing sentiment against frills, or mounting support for a return to the three R's in the public schools, has not yet had much observable impact on higher education. However, this could change virtually overnight, leading to a wave of conservatism which might not be supportive of general education.

Lack of Instructional Materials. As textbook publishers and other media producers have become more and more oriented to profit margins, they have become quite reluctant to invest in high risk undertakings such as instructional materials for a potential audience of general education courses.

Difficulty of the Task. Assuming that agreement can be reached on a definition of general education, the major task of selecting course content from a tremendous quantity of available knowledge is a difficult undertaking for skilled curriculum designers and a next-to-impossible task for most faculty.

Organizational Structure of the Colleges. The vast majority of community colleges are organized into departments or divisions, to preserve the integrity of discipline areas and simplify budgeting and cost accounting. However, this organization is basically contrary to general education in that it effectively restricts teaching to departmental budgetary areas.

Lack of Incentives for Change. Given the equal-treatment-for-all faculty-evaluation practices which are found in most colleges, why should a faculty member take on the additional, time consuming task of developing new curricula—especially when esteemed colleagues question the value of the task?

Personal Priorities. Although much has been written about the average age of community college students, little attention has been given to the ages of their teachers—and thus to the stage of development most are experiencing. Based on present data, the age range of most community college faculty members is from thirty-five to forty-five. This is exactly the period in which most adults undergo significant personal and emotional changes, all of which tends to occupy a great deal of their time.

Emphasis on Occupational Education. Students who shun college transfer courses in favor of occupational learning will not look with favor on efforts to include general education courses in an already tight curriculum—nor will the faculty of occupational programs be apt to welcome the intrusion of new academic courses into its planning.

Precedent. In much the same way that faculty members tend to
associate self-paced packages with any new approach to systematic instruction, they tend to associate general education with previous abuses in curriculum change. Thus general education is equated with the back-to-basics move and with competency-based curriculum, both of which have few faculty supporters.

forces favoring general education

Arrayed against these is a much smaller and considerably less active group of forces for change:

Current Visibility. There is no doubt that the present attention given to general education on individual college campuses was in large part initiated by the publicity given to it by the higher education press, in particular by the Chronicle of Higher Education and Change. This publicity, if used properly, can become a significant factor in causing faculty members to consider the topic.

Minimal Articulation Problems. As the percentage of students beginning in community colleges continues to rise, and as the percentage of traditional students falls, the barriers erected by transfer institutions to community college autonomy grow weaker. It is quite likely that a concentrated effort by community college personnel to negotiate a general education transfer agreement would now succeed in most states.

Competition for Students. Although admittedly this is an untested theory, it is not improbable that a strong general education program carefully marketed could be used as a major selling point in attracting students.

Cost Efficiency. By channeling the majority of students into a relatively small number of general education classes, the cost per student could be significantly reduced, since fewer instructors would be needed. The available excess in faculty time could be allocated to development of the curriculum or teaching of evening classes, thus reducing a constant source of complaint by the full-time faculty, and with considerable savings in faculty salaries.

Failure of Present System. Few objective evaluators would disagree that present distribution requirements have failed to achieve the goals of general education. If given sufficient publicity, these deficiencies could be used as a strong force for change.

Diverse Needs of a Changing Clientele. A good argument could be made for the increased need for general education by the present clientele of the community college. This is especially true of older students, housewives, mothers-turned-students and minorities.

Increased Shift Toward Occupational Education. A tremen-
dous need exists for a relevant general education program for those students whose two years of college are intended to be the end of their formal education. These students are well prepared for their jobs, but what of their preparation for life? Ten years ago, Robert Wiegman (1969, p. 14) addressed this issue in words which are as relevant today as then: "Flexibility; adaptability; critical thinking; discriminating between fact and opinions; solving problems logically; developing a set of values; recognizing the need for continuing education; and seeing the need to become participating members of society—these are what students need as they enter the employment world."

Success of the General Education Idea in Developmental Programs. Perhaps the closest thing to a true general education program is the curriculum developed by some colleges for their remedial or developmental students. Many of these are outstanding courses which would be of value to all students. In fact, in several instances known to the author, non-developmental students, after hearing about the content of these courses and learning that they could receive fully transferable credit for them, elected to enroll in them rather than in the traditional courses offered in the general education core.

Need for Revitalization. As campuses were constructed curricula planned, and teaching strategies developed, jobs which had once been fun were now becoming chores for many faculty. What is needed is something to rekindle the spirit of innovation and experimentation which once characterized the two-year college. General education could be that something.

Availability of Materials. Although earlier cited as a restraining force, the community college market is a lucrative one. If enough colleges were to become interested in general education, instructional materials would become plentiful as publishers rushed to make them available. Failing this, some individual colleges with large investments in printing and audiovisual resources could produce their own materials and make them available to other colleges, as Miami-Dade (Florida), Dallas (Texas), and Orange Coast (California) now do.

The Preferences of Instructional Deans. As discussed earlier, the majority of the instructional deans are very supportive of the concept of general education. Given this predisposition, some deans, if given a slight nudge, might begin to exercise some leadership in developing better general education programs.

conclusion

Quite obviously the struggles between these two groups of forces will produce markedly different outcomes on each campus. There are
presently several encouraging signs in the recommendations for change at Miami-Dade (Miami-Dade, 1977) and Los Medanos (Carhart and Collins, 1973). Consequently, the situation, though grim, is not lost. General education, like progress, is generally viewed with favor, but its predecessor, change, is viewed with fear and suspicion. In order for change to occur, the dead weight of inertia must be overcome. This requires positive action on the part of the board, the president, the dean, and the department heads, and depends on agreement among faculty members. General education will need to be defined and sold, its content and goals determined. Acceptable alternative means of operationalizing these goals will need to be found, and a valid plan for evaluating success will need to be developed. In addition, faculty will have to be trained; student support enlisted; curriculum changes approved; materials of instruction developed or purchased; organizational structures reexamined; compromises worked out on numbers of hours to be devoted; articulation agreements with four-year colleges developed; and so forth. The task is not one for the fainthearted. But it must be undertaken if the community college is to prepare its students with the education they need for survival today. Earlier in its history, the community college had an opportunity and missed it. It is often said that rather than looking backwards with regret and saying "what if" or "if only," one should say "next time." For the community college "next time" has arrived.

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Educators usually agree that general education is an essential part of college programs. However, they seldom agree on the definition, or description, of general education. And they frequently argue on how general education should be delivered. In 1977, the Carnegie Council on Policy Studies in Higher Education viewed general education as "an idea in distress" primarily because general education in most colleges is a consensus program put together by a self-serving faculty.

General education is usually presented in one of three ways: (1) The distributional requirement approach features a sampling of the departmental course offerings on a credit basis. Students are required to choose from a list of courses in the major divisions of knowledge: English, speech, science, social science, mathematics, humanities, and perhaps physical education. The intent is that the students gain breadth. In practice, however, students frequently make their selections for the wrong reasons: because the course is easy or offered at a convenient time, because a friend is enrolled, or because the course must be gotten out of the way. Distributional requirements appear to be based on the premise that all available courses make equal contributions to the general education of the learner. (2) The survey approach offers courses such as Introduction to Civilization, Man and
His Environment, World Literature, Physical Science, and Social Problems. Unfortunately, though the notion of survey course is appealing, this approach is popular with neither students nor the faculty. Survey courses may not transfer, may be watered down and poorly taught, and can weaken instructor-department relations. Consequently, students frequently feel that survey courses are a waste of time and effort. (5) In the life needs approach the general education content is selected from many disciplines and offered in interdisciplinary courses. A Marriage and Family course might feature sociology, home economics, psychology, anthropology, and biology. Civic Leadership might be based on political science, sociology, business, and law. Man and His Environment could call upon chemistry, biology, mathematics, and the humanities. This approach to general education undoubtedly interests many teachers and some students in that it provides new organizations and new methods. However, the approach suffers from a scarcity of competent teachers and the difficulty of course transfer.

Brown and Thornton (1963, p. 93) remind us: "There is as yet no fully satisfactory organization for general education, but the need for it is pressing and immediate. Failures and false starts do not excuse faculty members from continuing to search for ways to achieve this purpose of higher education." The reluctance of educators to face squarely the general education controversy is unfortunate. This is especially true for the community colleges, because they could be leaders in the area. Four-year colleges and universities are now recruiting community college graduates; and course articulation (when the Associate of Arts degree is awarded) is seldom a problem.

The problem of general education is accentuated in the community college, because there the students tend to be more heterogeneous with respect to age, experience, and education. Many community college students are quite competent in areas covered by general education courses. For such students certain requirements would be completely inappropriate. For certain other students, those with inadequate communication or mathematical skills, or those with an atypical psychological or cultural background, certain general education courses would be inappropriate.

challenge

It seems appropriate that community college educators lead the way to make general education a viable part of college education. They have certainly led the way in other aspects of curriculum and instruction. New curricula ranging from two-year nursing to environmental science have been developed, and new instructional delivery
systems ranging from audiotutorial instruction to competency-level education have thrived.

In 1968 Benjamin Bloom wrote, "Our basic task is to determine what we mean by mastery of the subject and to search for the methods and materials which will enable the largest proportion of our students to attain such mastery." Using mastery as our guide, it seems reasonable to suggest that it is about time for community college educators to define what is meant by general education, and to find ways to help students to obtain that general education.

Community college educators are becoming increasingly aware of the advantages of competency-based education in dealing with heterogeneous student groups. They note that able and mature students appreciate the opportunity to demonstrate mastery of educational objectives through competency tests and other indicators of achievement. They also note that average and less able students like to know exactly what must be accomplished in order to obtain credit and grade.

Competency-based education differs from the ordinary course-based education in at least six ways: (1) Education is directed to the attainment of specific objectives that have been defined by experienced educators. (2) Objectives are communicated to students before instruction begins. (3) Previously achieved objectives are recognized prior to instruction and credited in appropriate terms. (4) Mode and pace of instruction vary according to course objectives and individual preferences of students and teachers. (5) Criterion-referenced evaluation is used to ascertain the attainment of course objectives. (6) Students attaining specific objectives are awarded credit, while students failing to do so must take the course, or portions of the course, again.

Competency-based education can be a powerful step toward reducing the distress of general education. It begins with the task of defining in broad terms the goals of general education. The faculty of Alverno College (Wisconsin), for example, saw these goals in terms of the following abilities (Cassel, 1977):

1. To send, receive, interpret, find, and retrieve oral and written communication.
2. To use communications, logic, and reasoning to make valid judgments.
3. To recognize a problem, gather relevant data, organize information, analyze information, propose alternative solutions, and select the best solution.
4. To recognize, develop, and articulate a personal philosophy.
5. To interact in a formal or informal setting in a productive and positive manner.
6. To understand the relationship of the individual to the total environment.
7. To develop an awareness and understanding of the contemporary world.
8. To understand and appreciate the role of the arts and humanities in daily life.

These abilities are broad and unmeasurable. However, the list does represent a step toward the definition of general education. When goals are specified, educators can begin to refine these goals through the development of criterion statements.

At Central Technical Community College (Nebraska) (CTCC) the faculty is involved in the development of a competency-based general education program. This approach promises to be especially useful at CTCC because the college utilizes an open entry, open exit approach for all programs.

The CTCC program was initiated by a special committee appointed by the president. The committee adopted the broad goals of Alverno College and proceeded to reduce these goals to specific competencies, with the help of both the general education and the vocational-technical faculty. Faculty members were asked to suggest specific competencies within the broad categories, without stating criteria. The following is a compilation of those suggested by the general education faculty for two categories of abilities:

**Communications**

1. To use proper words; to recognize incorrect word usage.
2. To punctuate properly.
3. To organize and clearly express thoughts in writing.
   a. In compositions
   b. In business communications
   c. In reports
4. To be familiar with literature.
5. To improve one's vocabulary.
6. To recognize and use standard English in speaking and writing.
7. To proficiently use a dictionary, thesaurus, or other reference book.
8. To take meaningful notes.
9. To listen and to read critically.
10. To present ideas in group discussions.
11. To develop communication skills through group sharing.
12. To derive personal insights; to share those insights through group interaction.
13. To appreciate different perspectives (without needing to defend or to arrive at one answer for all).
14. To speed read.

**Oral Communications**

1. To open conversations with strangers.
2. To arrive at mutual interests.
3. To sustain and to end social conversations.
4. To conduct and participate in informal discussions.
5. To prepare for, conduct and use information-gathering interviews.
6. To listen sensitively.
7. To observe and respond to body language.
8. To recognize and respond to the needs of others.
9. To reflect the feelings of others.
10. To express honest feelings without praising, blaming or labeling yourself or others.
11. To analyze and consider audience receptiveness.
12. To choose topics for the purpose of speech.
13. To gather materials for a speech.
14. To organize materials into introduction, body, and conclusion.
15. To outline and prepare speaker's notes.
16. To support and clarify general statements with facts, illustrations and demonstrations.
17. To breathe well and deliver in natural conversational style.
18. To use pitch, tone, rate and pauses for variety and expressiveness.
19. To enunciate.
20. To use bodily action for communication effectiveness.
21. To keep eye contact and respond to feedback from an audience.
22. To analyze thought units; to contrast denotative and connotative meanings and climaxes in American prose, poetry, and plays.
23. To recognize moods and tones in literature.

Most persons looking at the lists provided by the CTCC faculty would conclude that the competencies listed are so broad and unmeasurable as to be essentially useless. However, the making of these lists represents only a step toward the development of competency-based education. At least five distinct steps remain: (1) Statements listed must be merged and rewritten as measurable objectives. Statements will generally follow the form: Be able to do x, under y conditions, and to z extent or accuracy. (2) Measurable objectives must be further scrutinized with respect to appropriateness to the learners involved. Thus,
measurable objectives are set before the faculty and other knowledgeable groups with the question of appropriateness for CTCC students. Appropriate objectives are retained and inappropriate objectives are rejected. At the same time the respondents are asked to identify what other objectives might be appropriate to CTCC graduates. (3) Appropriate and measurable general education objectives must next be identified with respect to a taxonomy. This serves to ensure that objectives cover both breadth and depth. (4) General education objectives may now be used as criteria for curricular revision. Existing general education course materials must be examined and revised so that they are designed to provide instruction that ensures the attainment of the general education objectives. (5) General education objectives must finally be restated as criteria. Actually this process is not difficult: be able statements are changed to do statements.

At Central Technical Community College steps two through five were in progress in 1978. Both the faculty and the committee were making progress toward a full competency-based general education program. When this has been fully developed, the college will be in a unique position with respect to providing a general education for an increasingly heterogeneous student body.

references


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A discussion of how community college faculty can integrate values education into the two-year college curriculum.

developing a values curriculum

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From the founding of Harvard in 1636 to the establishment of our most recent community college, values education has been a part of the undergraduate curriculum in the United States. But values education, once the explicit nucleus of higher education, is now more often vaguely implicit and peripheral in the curriculum. Some people argue that values education is not an appropriate role for community colleges. Their position is based on the belief that the examination of student value systems is an invasion of privacy which most likely leads to student indoctrination by the faculty member. But in view of current events in the American political process, our use and misuse of limited natural resources, the increase in world hunger, the acceleration of crime, and the decline of the influence of the church on man's moral and spiritual development, a redefinition of the college experience which places values education once again at the center of the curriculum seems imperative.

While the American college has had some impact on student development in the area of values, that impact has not been great. In his review of the emotional and moral development of college students, Bowen (1977) concludes that the assembled evidence (research evi-
The affective results of college education is far from definitive. Bowen believes that "... the relative strength of different values appears to shift during college, with substantial increases in the theoretical and esthetic values, substantial decreases in religious values, minor increases in social values, and minor decreases in economic and political values. ... The effect of college on the social and personal morality of students is uncertain" (pp. 132-133). Although Bowen feels the findings are impressive, he does not believe that these conclusions add up to a resounding affirmation of the positive impact of college upon the emotional and moral development of its students.

In considering a redefinition of values in education, we must ask ourselves if we can afford another Viet Nam or Watergate, or if we can allow the American family structure to continue to deteriorate. Educators especially cannot ignore these questions by relegating the role of values education to elective areas of the curriculum. It is imperative that we design our curricula to include an exploration of human values in each and every discipline and program area through a unified college-wide approach.

**selecting objectives and a conceptual framework for values education**

In order to place values education at the center of the college student's experience, it will be necessary to first establish college-wide mission statements or objectives. The adoption of college objectives in this area will require the involvement of the total faculty and administration. Their support will determine whether or not values education is integrated into all aspects of the student's formal education program. We have not been very successful in relying on Departments of Religion or general education or core courses to provide opportunities for the exploration, clarification, and evaluation of student's and society's value systems. While such departments and courses are valuable components of a values education program, they represent only a small part of a comprehensive approach to values education. At least ten to twenty percent of a student's undergraduate experience in each of his courses should be in the area of values education. This will require the involvement of faculty from all college departments and disciplines.

**Establishing Objectives**

Many examples can be given of college-wide objectives that could be adopted by a college wishing to stress values education. B. L. Johnson's twelve goals for general education provided two early examples of such objectives: "Developing a set of sound spiritual and moral
values by which he guides his life . . . using methods of critical thinking for the solution of problems and for the discrimination among values" (Thornton, 1972, p. 204). Other possible goal statements might require or challenge students to: (1) make their values explicit; (2) infer values from literature, art, history, philosophy, and religion; (3) understand the relation of values to scientific development and technological application; (4) apply valuing to the process of decision making; (5) broaden their understanding of valuing in cross-cultural situations; and (6) articulate and expound their own value judgements.

The catalog of Santa Fe Community College (1978) includes a
mission statement to the effect that the college is concerned with bringing about changes in human beings that will enable them to live richer, more rewarding, and productive lives. A primary objective, the catalog states, is to help each individual become increasingly familiar with the knowledge of the world order to better "develop sound moral and spiritual values" (p. 4). This is a good example of how a public two-year college can support an increased emphasis on values education.

Other examples in the private sector of higher education can be cited where values education has become a central focus in an institution’s curriculum. Such colleges as Peace College (North Carolina); Brewton-Parker College (Georgia); and Concordia Lutheran College (Texas), are but a few of the many private two-year colleges that have such a focus. Alverno College, a four-year, independent, liberal arts college for women, assumes that the valuing process can be taught, learned, demonstrated by students, and evaluated; that valuing processes are developmental (i.e., there is progression in evolving thought forms—cognitive, moral, and aesthetic); and that the valuing processes can be integrated with the content and methodology of most academic disciplines without doing violence to that discipline (Earley, 1978). Valuing is currently taught in every discipline at Alverno, in over forty courses involving over fifty percent of the faculty. It is our position that any two-year college could similarly define a curriculum which would integrate values education on such a college-wide basis.

Selecting a Conceptual Framework

The next step in developing a values curriculum will be the adoption of a theoretical framework which can help faculty members develop objectives for their courses, which also provide the rationale for curriculum planning throughout the institution, degree program, or course. A review of the more popular theories and approaches to moral and values education is pertinent.

The Values Clarification Approach. One of the most popular approaches to values education, at least at the public school level, has
been the "values clarification approach." Since the publication of *Values and Teaching* (1966) by Raths, Harmin, and Simon, the values clarification approach has gained much attention and is the most widely practiced approach to values education in the American school. In this approach, an individual simply clarifies his values with no particular set of values as a standard of measurement. The intention of values clarification is to encourage the individual to get in touch with his own values, bringing them to the surface and reflecting upon them.

Raths formulated the values clarification approach on the philosophy of John Dewey. Unlike other theoretical approaches to values, values clarification is not concerned with the "content" of people's values, but the "process of valuing." Raths focuses on how people come to hold certain beliefs and establish certain behavior patterns. According to him, valuing includes three basic dimensions and seven subprocesses:

**Prizing one's beliefs and behaviors:**
1. Prizing and cherishing
2. Publicly affirming when appropriate

**Choosing one's beliefs and behaviors:**
3. Choosing from alternatives
4. Choosing after consideration of consequences
5. Choosing freely

**Acting on one's beliefs:**
6. Acting
7. Acting with a pattern, consistency, and repetition. (Simon, Howe, and Kirschenbaum, 1972, p. 19)

The results of this process are called values.

Numerous teaching and curriculum strategies and materials have been developed from this values clarification approach. It offers a wealth of material for the administrator or faculty member who is interested in applying this theory in his or her college, degree program, or course (Kirschenbaum and Simon, 1973).

**A Cognitive Development Approach.** The major exponent of the cognitive-development approach to moral education is Professor Lawrence Kohlberg of Harvard University. Kohlberg built this theory upon the basic insights of Jean Piaget, the Swiss psychologist, and on the educational views of John Dewey. Kohlberg's approach is called "cognitive" because it recognizes that moral education, like intellectual education, has its basis in stimulating the "active thinking" of the child or adult about moral issues and decisions. It is called "developmental" because it sees the aims of moral education as movement through moral stages. These stages are:
1. **Preconventional Level**: At this level the student is responsive to cultural rules and labels of good and bad, right or wrong, but interprets these labels either in terms of physical or the hedonistic consequences of action (punishment, reward, exchange of favors) or in terms of the physical power of those who enunciate the rules and labels. This level is divided into the following two stages: (1) the punishment-and-obedience orientation, (2) the instrumental-relativist orientation.

2. **Conventional Level**: At this level maintaining the expectations of the individual's family, group, or nation is perceived as valuable in its own right, regardless of immediate or obvious consequences. The attitude is not one of conformity to personal expectations and social order, but of loyalty to it, of actively maintaining, supporting, and justifying the order, and of identifying with the persons or group involved in it. At this level, there are the following two stages: (3) the interpersonal concordance or "good boy—nice girl" orientation, (4) the "law and order" orientation.

3. **Postconventional, Autonomous, or Principled Level**: At this level there is a clear effort to define moral values and principles that have validity and application apart from the authority of the groups or persons holding these principles and apart from the individual's own identification with these groups. This level also has two stages: (5) the social-contact, legalistic orientation, (6) the universal-ethical-principle orientation (National Education Association, 1976, p. 20).

Kohlberg's moral reasoning clearly is reasoning which depends on advanced logical thinking. Thus, a person's logical stage puts a certain ceiling on the moral stage he can attain. While logical development is necessary for moral development and sets limits to moral development under Kohlberg's theory, most individuals he has found are higher in their logical stage than they are in their moral stage. As an example of this, Kohlberg has found that over fifty percent of late adolescents and adults are capable of full formal reasoning, but only ten percent of these adults display principled (stages 5 and 6) moral reasoning (Kohlberg, 1976).

Once again, one can find many descriptions of the application of Kohlberg's theory in the curriculum and instruction of the American public school. The theory awaits major testing at the college level.

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Perry's study demonstrates that aspects of intellectual and ethical development in late adolescence can be described in an orderly way. The scheme of development presents in its major outline those structures through which students in a liberal arts college appear sequentially to construe the world. Perry's students must be considered a relatively homogeneous group in intelligence and academic ability. Yet his study showed the wide range (within any one college year) of the ways in which students construed the nature of knowledge and the origin of values.

These three major approaches to values education might act as models to stimulate the organization of a curriculum which would incorporate any or all of them. The important issue in establishing a focused goal for values education in an institution is that some definitive approach(es) be adopted. A values education program is likely to have greater student impact if it is organized around some researched moral development or value theory.

As a note of caution, one should realize that the "values clarification approach" concentrates on the careful choice of values but has no underlying theoretical structure. Another potential problem with values clarification is that of ethical relativism. Both Kohlberg's and Perry's approaches to values education are based on a cognitive or developmental theory which specifies how moral development occurs. The advantage of these strategies is that they subject values and choices to critical evaluation from a moral perspective. Because of the limitations in the values clarification approach to moral development, possibly the best approach to values education would combine values clarification with one or both of the more theoretically based approaches to moral development. The values clarification approach can probably best be used as a classroom instructional strategy with moral development theory providing the structural framework for course and degree program development and evaluation.

Implementing an integrated approach to values education

An integrated approach to values education means that each administrator and faculty member in a college will have responsibility for values education. This will require new roles for many college faculty. As a result, major changes in both in-service education programs will be necessary for successful implementation of a values curriculum. In such programs, teachers should first be challenged to explore their own value systems. They should also learn how to use teaching strategies that will enable students to see the nature and consequences of their value-based behaviors.
Providing Support through In-service Faculty Development Programs

A number of approaches to in-service programs to develop faculty support of a values education program are conceivable. A college might conduct a values survey of faculty and students. Such a survey might be modeled after the values research of Brawer (1971) and Fay (1976) in the community college field. In these research studies the investigators used Rokeach's (1973) phenomenological approach to values and identified the relative rankings of student and/or faculty terminal and instrumental values. Terminal values were defined as true values—ends in themselves—as opposed to instrumental values which were defined as means for the sake of other ends. These studies have found interesting differences between student and faculty value systems as well as some differences between faculty in various disciplines and subject matter specialties. Values surveys could be used as a basis for starting in-service faculty workshops that would examine the possibility of implementing values education on a college-wide level.

Offering mini-grants to faculty members interested in values education is another approach to in-service faculty development. Centra (1976) recently found in his survey of faculty development practices in 756 colleges and universities, including 326 two-year colleges, that the "use of grants by faculty members for developing new or different approaches to courses or teaching" was rated as one of the most effective staff development techniques. This approach to developing a comprehensive institutional plan for values education would be particularly effective once a faculty has committed itself to a values curriculum.

Other findings in the Centra study suggest that the following in-service education programs might be used to further support an integrated approach to values education: (1) making use of internal or external consultants to assist faculty in the planning, implementation, and evaluation of values education; (2) providing summer grants for projects to improve or implement values education; (3) supporting visits by faculty to other institutions to review values education programs; (4) offering travel funds to faculty who are interested in values education; and (5) providing temporary teaching load reductions to faculty who are interested in working on new courses, major course revisions, or research in the area of values education. The key to success of one or more of these programs rests upon: (1) the support of the college administration for values education, (2) the level of hard dollars devoted to such faculty development programs, (3) the degree to which the faculty are committed to values education on a college-wide basis;
Examples of Values Education

Few examples exist of integrated approaches to values education in the community college field. El Centro Community College (Texas), a public, two-year college, offers the most comprehensive approach to values education that we were able to identify. At El Centro a core of values education courses has been developed. These course offerings, while a good beginning, however, fall short of the comprehensive, institution-wide approach which we are proposing.

The values curriculum at El Centro is a Human Development Program comprised of five elective courses. The five courses are as follows: (1) Human Development; (2) Career and Vocational Awareness; (3) Interpersonal Relations; (4) Personal and Social Growth; and (5) Leadership Behavior. This program has been in existence for nine years, with members of the college's counseling staff serving as the course instructors. Last year twelve hundred students enrolled in one or more of the program's courses which averaged sixteen to seventeen students per section. In a number of instances the courses offered were recommended to candidates for associate degrees, particularly in El Centro's health related programs. Other community colleges with similar approaches to values education include: (1) Richland College (Texas); (2) Tarrant County Junior College (Texas); (3) Moraine Valley Community College (Illinois); and (4) St. Claire College (Canada). To our knowledge, however, none of these colleges has adopted an approach to values education that would permeate the total curriculum.

For the most part, values education in community colleges today consists, if at all, of one required or elective course as part of the general education program. A review of the literature fails to produce one example of a public community college that has or has had an integrated, total institutional commitment to values education.

Santa Fe Community College (Florida) has in the past integrated values education into its general education core. Each student at Santa Fe was required to take six general education courses as part of the eighteen total credit hour program. At the heart of this core and each student's total educational experience was a required course entitled BE 100—Individual in a Changing Environment. This course was and presently is taught by members of the counseling staff of the college. BE 100 focuses on an exploration of student values in an attempt to help students clarify them. Particular attention, especially today, is given to the relationship of student values and career decisions.
the Education Testing Service's System of Interactive Guidance and Information, is used in the course to help students make value choices related to career plans. Ten basic student values are examined in the course.

While the faculty and administration at Santa Fe have recently decided not to require EN 100 as part of the general education program, it remains an elective course in the college's total curriculum. This change may signal a lessening of interest in values education at Santa Fe.

Miami-Dade Community College (Florida) has demonstrated some interest in values education. However, once again this interest is only expressed in the form of one new course as opposed to a total values-based curriculum. At Miami-Dade a general education core of five courses will be required of all students planning to complete an associate degree (Lukenbill and McCabe, 1978). One of these courses is entitled "Individual Growth and Development" and will provide students with opportunities to clarify their values and explore the value systems of others. A course of this nature falls far short of the comprehensive approach to values education we have proposed.

The preceding examples illustrate two approaches to values education: (1) the development of a sequence of elective courses and (2) the inclusion of a required general education course. A third approach to consider is one which would include a course on values in each of the college's degree programs.

**Summary**

If we are to solve many of the problems that face us today, it will be necessary that we integrate values education into the college curriculum. The approach recommended here is one of total integration with each faculty member assuming responsibility for values education in each of his or her courses and each administrator assuming responsibility for college-wide coordination of a unified values education plan. Such an approach will ideally lead to the student's spending at least ten percent of his or her first two years of college in values exploration and development activities. These recommendations are consistent with research findings reported by the Carnegie Foundation for the Advancement of Teaching in their recent book, *Missions of the College Curriculum* (1977). This study reports that:

For 62 percent of the undergraduates participating in the 1976 Carnegie Council Survey, for example, "formulating values and goals of my life" were "essential" outcomes of their education, and for an additional 31 percent (for a total of
98 percent) that outcome was "very important" (Carnegie Council Surveys, 1975-76) . . . . Ideally, we believe that, in courses where it is relevant, material should be provided that identifies the moral issues raised by research and practice within the discipline providing the course and explores the relationship between the discipline and the world at large. Every major should ideally offer a capstone course oriented to the moral and ethical concerns of the discipline (pp. 240-241, 244).

This quote suggests that American higher education may develop in cycles, returning to past models of education in times of curricular imbalance. Such an imbalance exists today in the area of values education. We need to correct this imbalance and restore values education to its former central place in American higher education.

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A carefully drawn plan for curriculum change can yield positive results.

administrative strategies for shaping the curriculum

louis w. bender

Shaping the curriculum is shaping the institution itself. In the final analysis, curriculum is the focal point from which every facet of institutional life emerges. The curriculum reflects the philosophy and operational commitment of the institution's educational program and therefore any strategy for shaping curriculum must be directed toward the entire institution.

needed: an action plan

Many institutions have sought to shape or change the curriculum by a piecemeal or an ad hoc approach. Typically, they have not experienced much success. A comprehensive action plan is needed. "What is?" and "What ought to be?" are questions which should be addressed by such a plan.

Purpose. Procedurally, the first crucial question to be answered is the purpose of shaping or reshaping the curriculum. All members of an institution should know why change is needed or additions are sought. Is the purpose to generate institutional vitality by updating instructional methods or educational programs, or is it to meet the needs of a new clientele? Is the real reason a matter of promoting
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