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ABSTRACT

This report, an update to the first edition published in 1995, addresses policymakers' concerns regarding "high performance" and provides a model for institutions assessing their effectiveness. Chapters 1 and 5 discuss the changing context in which colleges operate and present new directions in assessment. Chapters 2 through 4 provide a working definition of effectiveness, a model depicting its components, and a list of the 14 core indicators, organized according to mission arenas. Chapter 4 also includes detailed technical descriptions, along with data sources and additional measures, for each indicator: (1) student goal attainment; (2) persistence; (3) degree completion rates; (4) placement rate in the workforce; (5) employer assessment of students; (6) licensure/certification pass rates; (7) client assessment of programs and services; (8) demonstration of critical literacy skills; (9) demonstration of citizenship skills; (10) number and rate who transfer; (11) performance after transfer; (12) success in subsequent, related coursework; (13) participation rate in service area; and (14) responsiveness to community needs. The report closes with a plan of action for community colleges, including proposed changes in assessing organizational performance, and offers suggestions for responding to externally imposed measures. (EMH)

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TOWARD HIGH PERFORMANCE

Second Edition

ED 426 749

# Core Indicators of Effectiveness for Community Colleges

Richard Alfred  
Peter Ewell  
James Hudgins  
Kay McClenney

J99D 083

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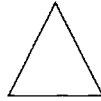
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Richard Alfred  
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COMMUNITY COLLEGE PRESS®

a division of the American Association of Community Colleges

Washington, D.C.

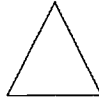
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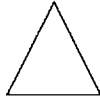
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## PREFACE

In December 1994, a roundtable was convened to examine the topic of core indicators of effectiveness in community colleges. The members of the roundtable chose several questions to guide the discussion: What is effectiveness and how is it different from concepts like efficiency, student outcomes, and performance assessment? Are community colleges different from other institutions when it comes to measuring effectiveness? Is effectiveness based on the mission of a college, or is it inherent in what stakeholders need and want from colleges? What should be measured and why? What is a “core indicator,” and how does it differ from other measures?

The discussion resulting from these questions touched on a number of ideas about how to define and measure effectiveness. The AACC special report *Community Colleges: Core Indicators of Effectiveness* summarized the discussion and synthesized different indicators for measuring effectiveness into a comprehensive model. This report was distributed to community colleges throughout the nation and became a benchmark for institutions beginning or expanding their efforts to define and measure effectiveness. By the mid-1990s, many colleges had adopted effectiveness models incorporating the core indicators.

The context in which our colleges operate has changed, however. The millennium is ushering in new forces, and stakeholders are looking at institutions with different eyes. Policymakers are interested in “high performance” and what institutions can and must do to get better results. For example, what must colleges do to retain more students, improve transfer rates, and see more students through to degree completion? Employers are interested in response time and customization. How quickly can institutions develop programs that meet workforce needs? And students want to be treated like customers. They want a relationship with their college that offers convenience, value, and quality, just as they would expect from a bank or other service provider.

In view of these developments, the objective of this second edition of *Core Indicators of Effectiveness* is to update the first report by examining changing conditions and new thinking related to effectiveness. Chapters 1 and 5 address

the changing context in which our colleges operate and new directions in assessment. These sections wrap around the main body of the report, chapters 2 through 4, which provide a working definition of effectiveness, a model depicting its components, and a list of the core indicators organized according to mission arena. Chapter 4 includes detailed technical descriptions, along with data sources and additional measures, for each indicator. The report closes with a plan of action for community colleges in chapter 6.

Community colleges are at the center of changes that will reshape their communities. The colleges have already made progress in designing and building systems for assessing effectiveness, but much remains to be done in measuring performance with stakeholders. Only a minority of colleges can produce credible data documenting student and institutional performance, and colleges continue to be vulnerable to policymakers' questions about performance on traditional measures of student success. We hope this second edition of *Core Indicators of Effectiveness* will be as useful as the first in helping practitioners tackle important issues in effectiveness. Beyond this, we hope that it will shed light on emerging themes in effectiveness, while helping colleges answer tough questions from stakeholders in a customer-focused, externally driven market.

*Richard Alfred*  
*University of Michigan*  
*Ann Arbor*





# THE CHANGING CONTEXT FOR EFFECTIVENESS

**A**s community colleges approach the new millennium, transformational forces are compelling them to raise fundamental questions, to make hard choices, and to implement necessary changes so they can improve performance. Colleges are responding by involving stakeholders more deliberately in decisions about resources. Arm's-length transactions between institutions and their constituencies are being replaced by aggressive alliances and outreach in which intangibles such as service, innovation, and flexibility become essential to success. New indicators of performance are drawing interest and becoming part of the effectiveness equation.

Among the transformational forces at work inside and outside our colleges, three are so pervasive that to ignore them is to invite trouble: changing markets, technology, and the drive for performance and accountability.

## CHANGING MARKETS

*Students with changing needs and expectations.* A powerful new wave of students with intensifying needs and expectations is hitting college campuses. Students and clients outside of college walls, such as employers, are becoming more and more critical of the quality of service they receive, and they expect something to be done about it. Students now say, "I want terrific service. I want convenience. I want quality. Give me classes 24 hours a day, and give me close-up parking if possible." Students do not want to pay for anything they are not using (Levine 1998). They want convenience, responsiveness, and flexibility, and they want it now—or they will go somewhere else to find it.

Two distinct attributes of this intensifying demand have important implications for effectiveness. A college's efforts to measure effectiveness must include not only its ability to meet current needs but also its ability to deliver what customers expect if they are to be pleased with the quality of service. Students have an expanding array of options for postsecondary education and quickly become

familiar with programs and services they once considered novel. The more experience students have with a program or service, the more discerning they become about their own needs and the variety of ways available for meeting those needs (Alfred 1999). As they progress along a scale of experience and exposure to what institutions have to offer and become familiar with other options, their needs begin to shift and their expectations to rise. Raised expectations are difficult to diminish. They drive up the standards against which students express satisfaction and create a new level of service expectation.

*New competitors.* Until recently, competition involved predictable relationships among known competitors in a stable market. Today, however, the environment is one of unpredictable and turbulent change. New competitors are reshaping the postsecondary education market. The University of Phoenix, the fastest-growing educational institution in the world, serves 70,000 students on 100 campuses in 32 states and offers an online campus with complete degrees. Phoenix is not alone. A growing number of for-profit higher education companies (DeVry, Inc.; ITT Educational Services, Inc.; Education Management Corporation; Computer Learning Centers) are setting up shop in storefronts near campuses.

Other players include the cable industry giants, the corporate universities (the fastest-growing sector in higher education), the course software developers, and the burgeoning array of new public and private partnerships. There are also the virtual universities, electronic campuses, and electronic community colleges, all without geographic boundaries (McClenny 1998).

In a competitive market, success comes to organizations that distinguish themselves in the eyes of customers (Alfred 1999). The University of Phoenix, for example, stands out because it has developed systems to quickly develop and deliver new programs to clients. Telephone and cable companies make education convenient through distance delivery into homes, community centers, shopping malls, and just about anywhere people congregate. Corporate training programs provide unique ways of connecting education and work. For example, Motorola and General Electric have developed customized training programs that give workers skill sets that can be transported to many different businesses. And we should not overlook the reputation for customer service that some proprietary institutions have established by totally reinventing processes such as student intake, placement, and financial aid delivery.

## TECHNOLOGY

External forces are driving heightened expectations for technology on community college campuses. One factor is the increase in computer ownership among American families. Today, more than 50 percent of U.S. homes have at least one computer (McClenney 1998). In 1997, for the first time, computers outsold televisions. Twenty-three percent of the population of the United States and Canada uses the Internet. By the beginning of 1999, an estimated 80 percent of U.S. public schools will be online.

In the United States, corporate spending on information technology surpassed expenditures on manufacturing technology several years ago. Computer technology is ubiquitous, cutting across income categories as well as educational and occupational lines. Technicians, farmers, small business owners, office workers, and degreed professionals are all likely to use computers in their daily work.

Demography also fosters expectations about the impact of technology on community colleges. Demographic data point to a rising demand for postsecondary education that has not been matched by gains in campus capacity. Distance education fuels rising expectations among state officials that technology can resolve some pressing capacity problems for less money than the costs associated with expanding campus facilities, building new campuses, or hiring more faculty (Green 1996). Policymakers are now concluding that traditional place-based, credit-for-contact educational models are too expensive to meet the rising demand for educational services (McClenney 1998). Technology will profoundly affect virtually every aspect of education: what students learn, how they learn, and when and where they learn.

## PERFORMANCE AND ACCOUNTABILITY

Pressures for performance documentation are intensifying for almost every constituency served by community colleges. The passage of Student Right-to-Know legislation in the Higher Education Act and a congressionally created blue-ribbon panel on college costs are two of the more recent manifestations of a trend that has been accelerating since the 1970s and is apt to intensify in the next century. The inescapable conclusion is that policymakers and the public are through with signing blank checks for higher education. Colleges are going to be expected to perform, to document their performance, and to be accountable for producing return on taxpayer and student investment (McClenney

1998). They are going to see this dynamic reflected in performance indicators, performance funding, performance contracting, and performance pay.

Accountability works as both an incentive and an obstacle for our colleges. As an incentive, it pushes colleges to develop performance models and indicators at a faster pace than would result from natural organizational processes. As an obstacle, it limits the terrain for interpretation of institutional performance to subjective criteria based on limited experience. All too often, these substitutes for direct experience drive accountability expectations, although they may have little or nothing to do with the mission of the institution or its performance.

A decade of rhetoric and effort has produced minimal change in performance assessment. Only a small number of colleges can produce credible data documenting student academic performance and progress. Our colleges continue to be vulnerable to policymakers' questions about performance on traditional measures of student success (graduation rate, time to degree, retention, transfer rate). And the colleges cannot mount an effective campaign to persuade policymakers to pursue alternative measures, because data is not available to make the case.

## IMPLICATIONS FOR EFFECTIVENESS

One major conclusion that can be drawn from this description of transformational forces is that effectiveness involves a push-pull effect for community colleges. Most institutions are focusing their effectiveness packages on mission achievement and student performance and progress. However, as colleges rely more on information and support from external stakeholders, they will need to supplement traditional academic indicators of performance with other indicators. Stakeholders will not readily commit resources to institutions that do not meet their expectations, or appear not to because they do not provide evidence to the contrary (Alfred 1998). Employers will not enter into contractual relationships with colleges that do not meet their quality, cost, and service requirements. Baccalaureate institutions will be hard-pressed to admit students from community colleges that do not provide a foundation in basic skills. Government agencies will not provide full resources to colleges that do not document a return on investment by publishing information about costs and degree and program completion. Community organizations will be reluctant to commit resources to institutions that do not get involved with important community development issues.

To meet this challenge, community colleges will need to ensure that their effectiveness systems are flexible and dynamic. These systems will change shape according to the demands of the market. Successful institutions will move beyond conventional approaches to effectiveness in which caution is valued more than action. Successful institutions will seek to create a fluid organization and to document performance using a blend of traditional and nontraditional indicators reflecting the expectations of multiple stakeholders.

## 2

# WHAT IS EFFECTIVENESS?

**E**ffectiveness is difficult to define and therefore eludes straightforward measurement. Like community colleges themselves, definitions of effectiveness change with the times. As argued in chapter 1, this is partly because external audiences are far more important than they were just a few years ago. Like professionals in healthcare and many other fields, insiders in higher education can no longer claim a monopoly in defining quality. Other change drivers include new fiscal and political conditions. Foremost among them are resource constraints due to taxpayer resistance, and new calls for accountability—both of which have resulted in demands for heightened productivity.

Despite these changes, the heart of any definition of institutional effectiveness remains the ability of an institution to match its performance to its established purposes as stated in its mission (Ewell 1992). This implies that the institution's outcomes are the ultimate measure of whether or not it can be deemed effective. It also implies that the effective institution can conclusively document the outcomes it produces in support of its mission. Surrounding this definition, however, are two important caveats.

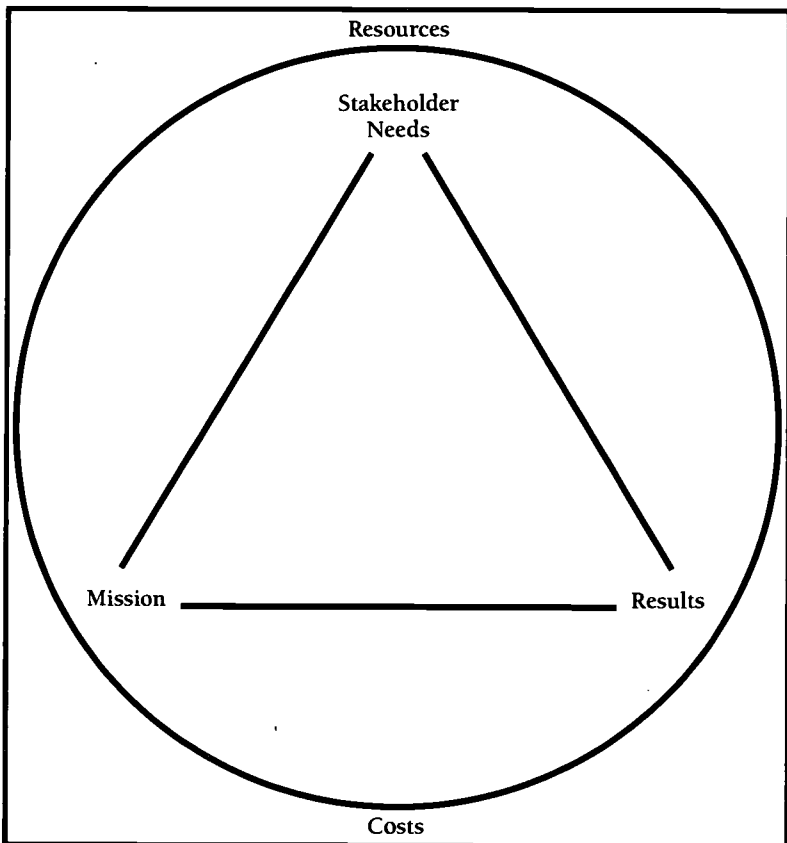
First, both purposes and results must be consistent with a growing variety of stakeholder needs. No community college, regardless of the quality of its graduates, can be considered effective if its results are incongruent with its clients' needs and expectations. As a consequence, specific judgments of college effectiveness cannot be uniform. Instead, they will always vary according to the needs and values of a college's stakeholders (Alfred and Kreider 1991). An institution's willingness and capacity to determine and quickly respond to stakeholder needs is also an integral part of effectiveness.

Second, results must be produced efficiently within the constraints of available resources. Under current financial and political conditions, no community college will be able to meet stakeholder needs without increasing costs—even if it wanted to hold the line on costs. Efficiency and effectiveness are different concepts, and community college leaders need to work hard to ensure that

simple efficiency measures are not substituted for real indicators of effectiveness. The wise use and responsible stewardship of available resources in the pursuit of mission-related goals must become an integral part of today's definition of effectiveness.

These key ingredients of institutional effectiveness—and their interrelationships—are shown in figure 2.1. A college or university is effective when its results match its mission, but both mission and results must also match stakeholder needs. In addition, these relationships must be maintained within the limits of costs and available resources.

Figure 2.1  
Core Concepts in Institutional Effectiveness





## MODELING AND MEASURING EFFECTIVENESS

The following definitions and guidelines provide the context for a discussion of core indicators.

### DEFINITIONS AND MEASUREMENT GUIDELINES

- *Outcomes* serve as benchmarks for the college mission by comparing results with purpose, within the limits of costs and available resources. The effective community college creates successful outcomes for multiple stakeholders, internal and external.
- When outcomes are compared with an institution's mission and goals, the result is a composite picture of an institution's *effectiveness*.
- An *indicator* that helps create this composite picture describes a condition or result that the community college can produce regularly, report publicly, and use systematically in decision making.
- A *core indicator* is a measure that describes a critical, widely recognized outcome of mission—one that is clearly responsive to key constituent groups and is produced regularly.

The measurement of core indicators should reflect and support sound assessment practice. The following guidelines, framed as questions, make it more likely that the measurement of core indicators will conform to accepted practice and that specific measures will become useful tools for determining effectiveness.

- Is the indicator supported by a comprehensive information system?
- Is the indicator part of a commitment to track important data over time, ensuring that documenting and improving effectiveness is a developmental process?
- Is there a standard of comparison or a benchmark against which progress can be measured?



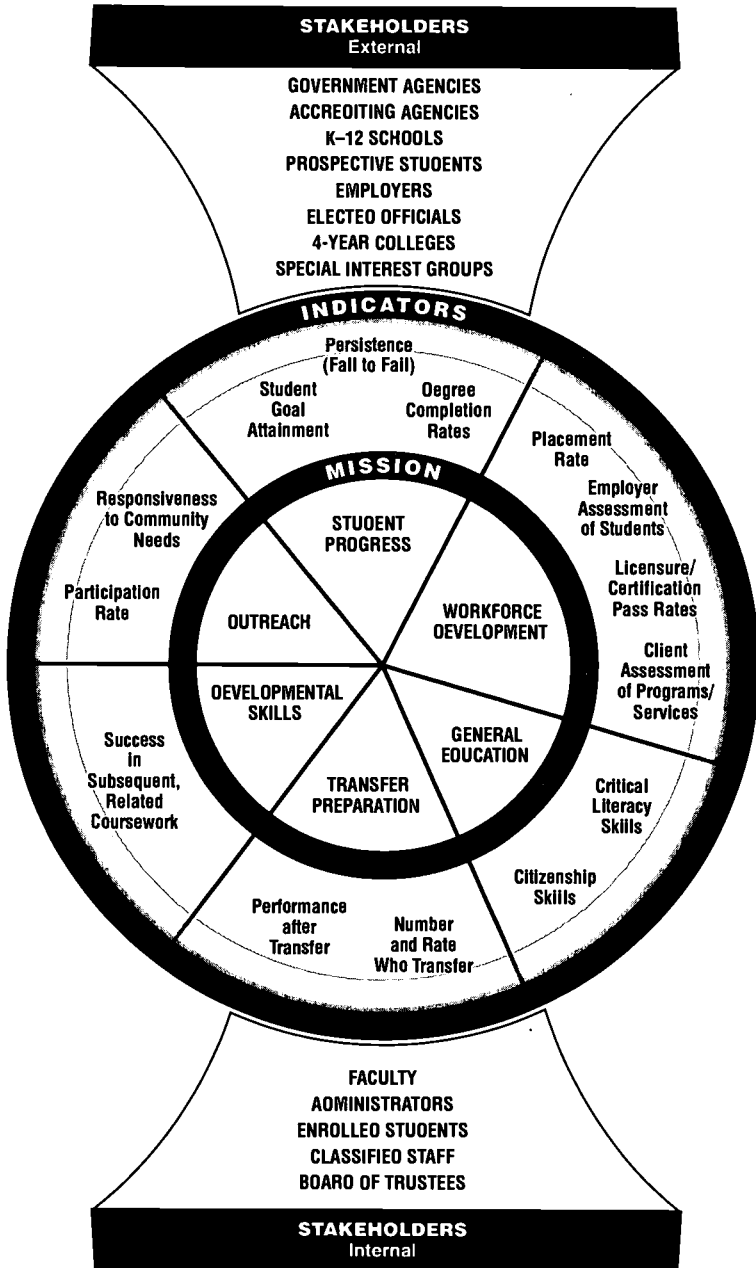
- Is the ongoing reliability of the indicator regularly assessed? Are changes made when needed?
- Is the indicator credible to college personnel who are in a position to change institutional behavior?
- Can the indicator be readily understood by external decision makers? Is it credible to them?
- Does the indicator provide information that will help the institution to improve? Does it encourage the institution to value the right things?
- Does the indicator reflect the perspectives and concerns of multiple constituencies?
- Can data be obtained for the indicator at a reasonable cost?

## MODELING THE CORE INDICATORS

A model is an abstraction of reality that can be used to improve our understanding of concepts such as effectiveness. If effectiveness is defined as the capacity of a college to match its *results* with its *mission* and the *needs of its stakeholders* within the limits of costs and available resources, what would an effectiveness model look like? We know that community colleges have many stakeholders, but are they equally important? We also know that stakeholders view colleges differently depending on what is important to them—they have different performance expectations stemming from different needs. Finally, we know that colleges cannot measure everything—efficiency is important—and that means they must use a smaller number of indicators carried out with a limited number of stakeholders.

These observations can be drawn together and represented in a comprehensive effectiveness model as illustrated in figure 3.1, which identifies different stakeholder groups—internal and external—and presents core indicators representative of different expectations. To enhance the efficiency of the model and to make it organizationally relevant to community colleges, the core indicators are clustered into the mission arenas commonly pursued by community colleges. For example, the indicator Degree Completion Rates is included in the Student Progress arena. The core indicators are not mutually exclusive and can be shared by internal and external stakeholders. Their importance will vary among stakeholders.

Figure 3.1  
Comprehensive Effectiveness Model



The core indicators are not random, isolated measures. As the model shows, they connect the mission of a college and the results it produces with the needs of its stakeholders. Practitioners are encouraged to use the model as a basis upon which to review existing effectiveness plans or to build new plans.

## MISSION ARENAS AND CORE INDICATORS

Following are descriptions of 14 core indicators, grouped into six mission arenas. For each arena, an introductory statement emphasizes key mission themes and provides advice.

### *Student Progress*

Student progress and achievement come in many forms in community colleges. The progress measures suggested here support the assessment of mission effectiveness by providing an overall picture of student success. They reinforce the understanding that student achievement is developmental and that measuring it requires tracking both intent and behavior over time.

The Student Goal Attainment measure seeks to capture individual intent and then traces its achievement. It is the most important of the indicators. The other two measures, Persistence (Fall to Fall) and Degree Completion Rates, follow the behavior of cohorts of students and are less descriptive. They are included here in part because they are so frequently mandated at state and federal levels, but also because they can become useful tools when incorporated into a larger effort to chart student progress. The danger lies in misinterpreting this aggregate data by applying traditional academic assumptions about persistence and degree completion to the much broader range of behaviors that community college students exhibit.

Core Indicator 1: Student Goal Attainment

Core Indicator 2: Persistence (Fall to Fall)

Core Indicator 3: Degree Completion Rates

### *Workforce Development*

As the job market changes, career programs are not only growing in importance but are also constantly responding to shifting expectations. Fewer curriculum pathways require exactly two years to complete, and fewer career ladders relate neatly to associate degree preparation. More workers are turning to quick-response noncredit programs for career education. They are beginning to see initial preparation for work and later upgrading of job skills as part of a

continuum; workforce readiness has become an ongoing task that requires a variety of programmatic responses.

Core indicators need to reflect these dynamics and make the assessment of various forms of career preparation a routine activity. The following guidelines will help in this process. First, the evaluation of a student's career goals should not be based on either certificate or degree completion. Objective data such as licensure/certification pass rates should be collected, and employers should have the chance to provide feedback about their levels of satisfaction. Employers need to be able to comment on results relating to student retention, promotion, and capacity for career-long growth. Finally, an effort should be made to measure noncredit and continuing education functions, as well as credit functions in workforce development.

Core Indicator 4: Placement Rate in the Workforce

Core Indicator 5: Employer Assessment of Students

Core Indicator 6: Licensure/Certification Pass Rates

Core Indicator 7: Client Assessment of Programs and Services

### *General Education*

The goal of general education is to strengthen both the general skills and broad analytical capabilities that students need in order to function competently in day-to-day life. This particular mission arena has grown in importance and complexity in recent years. Today's students are expected not only to possess skills such as writing and problem solving, but to be able to apply their skills and knowledge in an interdependent, culturally diverse world. Community college professionals who have long stressed the importance of creating a strong educational foundation are now incorporating multicultural themes into across-the-curriculum priorities. Equally important, an increasing number of employers and community leaders are insisting that college-educated adults perform more effectively in the demanding, complex world in which they live. College-educated adults must understand diversity and be comfortable with change.

To assess general education competence, measures in two broad areas are recommended: Demonstration of Critical Literacy Skills (communication, critical thinking, problem solving, interpersonal skills, etc.) and Demonstration of Citizenship Skills (community involvement, multicultural understanding, leadership, etc.). At a minimum, the evidence gathered in these categories should go beyond the accumulation of credits. Students who accrue only a few credits should not be included in research, and assessment should focus on feedback from those in the community who rely on general education competence.

Since general education competencies include both basic and higher-order abilities, are developed across the curriculum, and are best demonstrated through the application of knowledge, measuring their achievement requires sophisticated forms of assessment. Many strategies have been tried with varying degrees of success. Community colleges will need to continue to test and refine existing methodologies and develop their own local indicators of general education competence. Several promising strategies are discussed in the technical description in chapter 4.

Core Indicator 8: Demonstration of Critical Literacy Skills

Core Indicator 9: Demonstration of Citizenship Skills

### *Transfer Preparation*

Although transfer remains an obvious and appealing mission for both internal and external audiences, it is a particularly appealing arena for policymakers. It is a cost-effective, responsive strategy that broadens the impact of public education by making the first two years of a college education more accessible.

Unfortunately, too many decision makers continue to work from the assumption that community college students will move quickly to transfer from high school to community college to baccalaureate attainment. Since this is often not the case, assessment of this function must track students in order to document transfer patterns. Two indicators are commonly used to track transfer students: Number and Rate Who Transfer, and Performance after Transfer. Although recording student intent to transfer is a logical and essential first step in this process, early statements of student intent are frequently unreliable. Thus, to avoid mistakes in subsequent measurement, the number and rate of actual transfers must be monitored and updated each semester or year.

This line of reasoning suggests the following ground rules: First, request information about student intent more than once. Then, follow student behaviors as evidence of intent. Continuous assessment should provide answers to the following questions: Have students enrolled for more than one semester, earned a designated number of credits, or filed a degree plan? Avoid measuring transfer success based on certificate- and degree-completion rates at the community college, since many students will follow fluid, open-ended matriculation patterns.

Core indicators in this category provide insights at two different levels of analysis. The Number and Rate Who Transfer indicator is suited to a systemwide rather than institutional level of analysis, since transfer goals may vary

from community to community and college to college. The Performance after Transfer indicator can be usefully compared from college to college.

Core Indicator 10: Number and Rate Who Transfer

Core Indicator 11: Performance after Transfer

### *Developmental Skills*

By enhancing and reinforcing the skills of underprepared students, developmental education supports the community college's ability to achieve its mission. Although developmental education has typically been evaluated exclusively within the college environment, it is also an area of keen interest to policymakers who seek assurances that students receiving remediation perform well in subsequent college-level coursework.

A single core indicator—Success in Subsequent, Related Coursework—is proposed under this heading. It presents a useful way for colleges to determine how well they are performing as they reach out to an enormously diverse student population, many members of which are underprepared. At the same time, it provides a reliable measure of return on investment for policymakers who are outspoken in their criticism of the public school system and concerned about recurring expenditures to teach basic skills.

In addition to the core measure itself, colleges are encouraged to try to collect data for three additional descriptive statistics: the number enrolling who need remediation, the number of those who need remediation who are actually served, and a follow-up comparison between the achievement of students who undertake remediation and those who do not. Although some states currently judge the effectiveness of remediation based on a state-mandated test, a strategy that will surely become more common, we propose an indicator that more directly assesses classroom performance.

Core Indicator 12: Success in Subsequent, Related Coursework

### *Outreach*

The outreach mission of the community college grows out of the social, economic, and cultural circumstances in a local setting. The relationships thus formed are unique and interactive. They require that the college remain alert to local needs and that it respond with programs and services that reflect its institutional capabilities and values.

The Participation Rate in Service Area indicator describes the involvement of community groups and individuals with the college. Such a measure can be particularly useful in helping practitioners determine whether there is

appropriate, proportional representation from various segments of the community in college programs and services. Because community development requires identifying and reaching out to underserved populations in a service area, this indicator becomes a valuable mechanism for identifying gaps in service.

Measuring effectiveness in this arena is not easy. Unlike other aspects of mission that are defined in less situational terms, community development programs grow out of specific needs, and their evaluation is idiosyncratic. For this reason, no one methodology is suggested for the Responsiveness to Community Needs indicator, beyond the general rule that colleges must in some way identify a client, determine the client's needs, and measure the client's involvement in and satisfaction with the college's response. In addition, any such measure needs to be monitored over time if it is to become a true index of responsiveness. A number of potential methodologies are discussed in chapter 4 of this report.

Core Indicator 13: Participation Rate in Service Area

Core Indicator 14: Responsiveness to Community Needs



## CORE INDICATORS: A TECHNICAL DESCRIPTION

**A**s discussed, many of the core indicators do not readily lend themselves to measurement. To become operational, they need to be carefully defined and carried out. The following pages present technical descriptions—including a working definition, a description of appropriate data sources, and additional measures—for each indicator.

### STUDENT PROGRESS

#### CORE INDICATOR 1: STUDENT GOAL ATTAINMENT

**Measure:** The proportion of students who, upon leaving community college, report that their original goal in attending (or subsequent goal decided while enrolled) has been met.

**Data Sources:** The recommended method is periodic surveys of the student population according to a longitudinal design that includes at least the determination of student goal at entry and a follow-up soon after exit to determine if the goal has been met or has changed. Most desirable is a method whereby student goals are assessed each time the student registers.

**Additional Measures:** An alternative approach to measuring goal attainment is survey items that list particular intended outcomes of college on instruments such as entering student questionnaires, surveys of currently enrolled students, and regular follow-ups of former students. Such items typically include potential outcomes, such as “learning how to communicate in writing,” “learning how to work better in groups,”



or “learning skills that will enable me to advance on my job.” Some 15 to 20 items can be efficiently administered using five-point Likert-type scales to determine (a) how important the student feels that trait is and (b) how much the college has contributed to the student’s development of the trait.

### **CORE INDICATOR 2: PERSISTENCE (FALL TO FALL)**

**Measure:** Of the cohort of students who register for their first credits at a community college in one fall term, the proportion that is still enrolled for at least one credit the following fall term and has not completed a degree or certificate.

**Data Sources:** The recommended data source is a continuously updated longitudinal database that tracks an identified entering student cohort (that is, all students registering for their first credits at the community college in a given term) from entry to exit using data elements such as course and program enrollment and degrees and certificates awarded (Ewell, Parker, and Jones 1988; Palmer 1990).

### **CORE INDICATOR 3: DEGREE COMPLETION RATES**

**Measure:** The proportion of an entering community college cohort officially enrolled in a degree program that actually completed a degree or certificate, reported at annual intervals.

**Explanation:** The emergence of the federal Student Right-to-Know legislation and numerous state reporting requirements has highlighted this statistic as a performance indicator, and it is thus impossible to ignore. Recognizing

that community college students take as long as seven or eight years to earn a degree, the proposed indicator has no end point or time limit. Also, unlike federal and some state regulatory requirements, this indicator includes all entering students—not just those who are full-time, first-time-in-college students. While this may deflate reported graduation rates, it more fully reflects actual community college populations, the majority of which are in fact part-time attenders. Given the sensitivity of this statistic, it should never be presented in isolation. It should be reported selectively so that attendance patterns, course-taking behaviors, and intentions of different student groups are apparent. This core indicator should always be reported in conjunction with Core Indicator 2, Persistence (Fall to Fall).

**Data Sources:** The recommended data source is a continuously updated longitudinal database that tracks an entering community college student cohort from entry to exit using data elements such as date of initial enrollment, degrees or certificates awarded, and duration of study. Cohorts should be constructed so that they are consistent with (but more inclusive than) those required for current federal and state reporting.

**Additional Measures:** The following additional statistics are recommended to more fully measure effectiveness:

- reporting data for full-time, first-time-in-college students (for example, Right-to-Know students) versus other students in the cohort.
- reporting data according to whether students completed 12 credits.
- reporting data according to whether students reported “degree attainment” as an initial or current goal.
- reporting data for current proportions of students attending part-time versus full-time.
- reporting data for current proportions of students reported as successfully transferring or obtaining employment without having earned a degree or certificate from the community college.

## WORKFORCE DEVELOPMENT

### CORE INDICATOR 4: PLACEMENT RATE IN THE WORKFORCE

**Measure:** The proportion of an entering community college student cohort achieving a “marketable skill” (that is, completing at least three occupational or technical courses in a particular field of training) that obtains employment in a field directly related to that skill within one year of last attendance.

**Data Sources:** The predominant method used is a follow-up questionnaire administered periodically to former students by mail. If available, state employment information (generally available through a state’s Department of Labor or its equivalent) provides a more direct method of assessment. The obvious limitation of this methodology is the fact that many state databases do not contain the job information required to adequately identify occupation.

**Additional Measures:** The following additional measures are recommended to better communicate effectiveness:

- reporting data for students according to the amount of prior credit earned at the community college and by whether a degree or certificate was earned.
- reporting data for students according to occupations that are both directly and indirectly related to the students’ field of training.
- a statistic that reports the placement rate of all students enrolling for at least one occupational or technical course at the community college (this relaxes the “marketable skill” restriction in the core measure).

### **CORE INDICATOR 5: EMPLOYER ASSESSMENT OF STUDENTS**

**Measure:** The proportion of a sample of regional employers in a given field who indicate that their employees who received training at the community college exhibit skills and job performance that are equivalent or superior to those exhibited by all employees.

**Data Sources:** The recommended method is a periodic cross-sectional survey of a sample of area employers using an open-ended questionnaire that asks employers to list the specific programs and institutions from which they recruit or from which they obtain their “best” employees. Because of higher response rates, this is preferred to the more typical two-phase follow-up method, in which former students are first contacted to identify their employers and the employers are then surveyed. Multiple attributes of performance should be assessed and a Likert-type rating scale of at least five points should be used in the questionnaire. If resources are available, in-depth interviews with employers are recommended.

**Additional Measures:** To render employer ratings more meaningful, it is recommended that they be broken down by field of training, by job classification, and by specific performance attributes (such as specific job skills, work attitude and sense of responsibility, and potential for advancement).

### **CORE INDICATOR 6: LICENSURE/CERTIFICATION PASS RATES**

**Measure:** The proportion of those who complete or graduate from a community college vocational or technical program and then actively seek licensure or certification for the first time within a given year, who actually obtain licensure or certification.

**Data Sources:** The predominant method used is a follow-up questionnaire administered periodically by mail to former students or those who have completed programs. If available, information obtained directly from state licensing and certification bodies provides a more complete method for compiling such statistics. Information obtained in this manner must be compiled on a field-by-field basis by contacting the relevant licensing or certification body. In some states, lists of such bodies are available through the state higher education executive office (SHEEO) or the office responsible for professional regulation within the state.

**Additional Measures:** Statistics about overall licensure passage should be broken down by field of study to make them more meaningful. A distinction should also be made between fields in which licensure or certification is required for employment or practice and those in which it is not. To reflect the fact that not all fields are governed by such recognition, and not all students seek certification in cases in which it is voluntary, the proportion of total graduates actively seeking certification should also be reported.

### **CORE INDICATOR 7: CLIENT ASSESSMENT OF PROGRAMS AND SERVICES**

**Measure:** No single statistic currently meets the intent of this indicator.

**Data Sources:** Responding to the intent of this indicator requires the institution to determine (a) the array of different clients that it serves; (b) the nature, types, and volume of programs, services, and activities it provides to different clients; and (c) the extent to which clients are involved in and satisfied with programs, services, and activities. *Client* describes many different individuals, groups, and organizations coming into contact with community colleges for many reasons, whose involvement and satisfaction must be independently determined and assessed. Successful reporting of this

indicator therefore requires multiple methods for gathering information, including surveys, focus group meetings, face-to-face and telephone interviews, and participant observation.

***Additional Measures:***

Some of the data sources that can be used to collect information consistent with this indicator are the following:

- specially designed evaluations that are administered to the clients who participate in programs and services in order to determine their expectations and the extent to which the program or service met, exceeded, or fell short of expectations.
- periodic surveys carried out with client groups, typically mail or telephone surveys using an instrument designed to collect information about both client involvement in, and satisfaction with, the program or service.
- written reports by professional staff members based on (a) observation of clients participating in programs and services, and their resulting expressions of satisfaction, and (b) interviews with clients during and after contact with the program or service.
- focus group meetings of client groups to determine their involvement in and satisfaction with programs and services.

## GENERAL EDUCATION

### CORE INDICATOR 8: DEMONSTRATION OF CRITICAL LITERACY SKILLS

**Measure:** No single statistic satisfies the intent of this indicator.

**Data Sources:** Although the definition of literacy is shaped by complex social forces, this does not absolve community colleges from demonstrating that they develop literacy skills. Assessing literacy requires a multiplicity of methods appropriate to the kinds of literacy tasks that students will be facing in the community and on the job. Mere data collection is not enough.

Once the community college agrees that a particular set of literacy skills is an important outcome, it must ensure that those skills are (a) taught throughout the curriculum in both transfer and occupationally related courses, and (b) regularly embodied in local assessments designed by faculty. Many methods are appropriate to determine literacy skills at both the institutional and programmatic levels. Among those recommended are the following:

- faculty-designed instruments to be administered to students as appropriate, modeled on such national literacy assessments as the National Assessment of Educational Progress (NAEP) adult literacy scales. Typically, these assessments present students with natural literacy tasks such as reading a set of instructions, interpreting published charts and graphs, completing a required form, or reading and interpreting a schedule.
- specially designed “in-basket” exercises that require students to assimilate a variety of materials, interpret their significance, and prioritize them for action. Exercises of this kind can be embedded in capstone experiences that are a part of many applied programs.
- exercises that require students to read and interpret a typical news story.
- specially designed questions on student follow-up surveys that ask about behavior in areas such as current reading habits, perceptions of current events, etc.

### **CORE INDICATOR 9: DEMONSTRATION OF CITIZENSHIP SKILLS**

**Measure:** No single statistic satisfies the intent of this indicator.

**Data Sources:** Citizenship is a complex attribute requiring multiple evidence-gathering techniques and an institution-wide process to ensure that its development and assessment are included in instructional delivery.

The following are among the most promising methods for gathering information consistent with this indicator:

- specially designed questions included in alumni follow-up surveys that ask whether the student has voted in a local election, has participated in voluntary or community service work, or follows the news regularly.
- portfolios documenting citizenship activities that students have participated in while enrolled, such as volunteer work, memberships in student groups, active participation in political campaigns, etc.
- documentation of student participation in group or problem-solving exercises in which leadership and group-membership skills, along with appropriate occupational or technical skills, can be demonstrated.
- specially designed exercises included in regular course examinations that require students to determine the impact of their actions on others or their broader responsibilities to others.

## **TRANSFER PREPARATION**

### **CORE INDICATOR 10: NUMBER AND RATE WHO TRANSFER**

**Measure:** The proportion of an identified entering cohort actively enrolled in a degree program at the community college and completing at least 12 semester hours of credit (or equivalent), who then enroll within two years for at least 12 college-level credits in a degree program at a four-year institution.

**Data Sources:** The preferred data source for this indicator is actual student record data obtained from the transfer institution. Available methodologies, listed in order of desirability, include the following:

- state-level enrollment information that directly matches students who attend community colleges and four-year public colleges by means of a student identification number.



- electronic transfer of transcript information in a defined format.
- aggregate reporting obtained periodically from senior institutions.
- self-reports obtained from a follow-up questionnaire administered to former community college students.

***Additional Measures:***

The following additional measures are recommended to better communicate effectiveness:

- reporting data for students according to the total number of credits earned at the community college and according to prior degree completion.
- reporting data for students according to whether they explicitly indicated an intent to transfer, obtained through a regularly administered survey of student intent.
- reporting the proportion of former community college students enrolling for at least one credit at the transfer institution (relaxing the 12-hour transfer constraint at the senior institution).

**CORE INDICATOR 11:  
PERFORMANCE AFTER TRANSFER**

***Measure:***

The proportion of regular college-level courses at the transfer institution completed with a grade of “C” or better by students who previously attended the community college, compared with a parallel proportion obtained for students who began their studies at the transfer institution as first-time freshmen.

***Data Sources:***

The recommended data source is a continuously updated longitudinal database that tracks an entering community college student cohort from entry to exit using data elements such as date of initial enrollment, degrees or certificates awarded, and duration of study. Cohorts should be constructed so they are consistent with (but more inclusive than) those required for current federal and state reporting.

**Additional Measures:**

This core measure is usefully tabulated for the following student groups to better communicate effectiveness:

- reporting data for students according to the number of community college credits earned prior to transfer in blocks of 15 credits (for example, fewer than 15 credits, 15–30, 31–45, 46 or more credits).
- reporting data for students according to whether they earned a degree or certificate before transferring.

**DEVELOPMENTAL SKILLS****CORE INDICATOR 12:****SUCCESS IN SUBSEQUENT, RELATED COURSEWORK****Measure:**

The proportion of an identified entering student cohort that is assessed as deficient in one or more of the basic skills (reading, writing, computation), who subsequently (a) successfully completes developmental work intended to remediate this deficiency and (b) within one year completes their first college-level courses requiring the use of this skill with a grade of “C” or better.

**Data Sources:**

The recommended data source is a continuously updated longitudinal database that tracks an entering community college student cohort from entry to exit using data elements such as basic skill proficiency levels, course enrollments, and course grades (e.g., Ewell, Parker, and Jones 1988; Palmer 1990).

**Additional Measures:**

The following additional statistics are recommended to further communicate effectiveness on this indicator:

- the comparative persistence and degree-completion rates of students assessed as deficient and remediated for each basic skill, compared with similar rates for (a) students assessed as proficient and (b) students assessed as deficient and not remediated for each basic skill.

- the comparative rates of successful college-level course completion with a grade of “C” or better for these three populations.

## OUTREACH

### **CORE INDICATOR 13: PARTICIPATION RATE IN SERVICE AREA**

**Measure:** The proportion of the total population aged 17 or older in the college’s service area that has participated in at least one organized activity (course, program, service, event, etc.) sponsored by the college in the past year.

**Data Sources:** The most common source is the college’s records of attendance at all college-sponsored classes, events, or activities. The recommended method is a periodic community impact survey administered to a representative sample of residents in the service region. This survey should contain items describing various types of contact with the college (formal and informal), and overall reactions and satisfaction rates.

**Additional Measures:** Unduplicated headcount enrollment and total attendance figures can be usefully reported for this indicator. To get an approximate measure of extent of use, another statistic is the total number of recorded contact hours (the duration of an event times the number of persons participating in the event) for all activities (both instructional and non-instructional), divided by the service region population.

### **CORE INDICATOR 14: RESPONSIVENESS TO COMMUNITY NEEDS**

**Measure:** No single statistic currently meets the intent of this indicator.

**Data Sources:** Responding to the intent of this indicator requires the institution to engage in an ongoing process of (a) identifying community needs and expectations; (b) demonstrating that it is responsive to these needs and expectations by continuously improving and adapting its programs and services; (c) demonstrating that the constituency groups served are satisfied with, and have benefited from, these programs and services; and (d) demonstrating that it actively seeks ways to establish and promote partnerships with other entities and organizations for the benefit of stakeholders or the community. A community college's stakeholders will almost always consist of distinct constituencies and subgroups whose needs and expectations must be independently determined and assessed. Meeting the challenge of this indicator will thus require that multiple methods be used for gathering evidence, but more important, it will require that an established, ongoing process of planning and reviews be used to ensure that the evidence is appropriately integrated, interpreted, and acted upon by the institution.

**Additional Measures:**

Some of the data sources that can be used to collect information consistent with this indicator are the following:

- periodic needs assessments carried out with citizens in the college's service region; these are typically mail or telephone household surveys, using an instrument designed to collect information about current educational and service needs, and about contact and satisfaction with the college.
- surveys or focus-group meetings with community organizations, citizens groups, employers, etc., to determine needs and current levels of satisfaction.
- environmental scanning processes designed to systematically examine the content of printed matter such as newspaper stories, editorials, job advertisements, and employment and other socioeconomic data about community trends, to determine long-term patterns of community development and future needs.

- specially designed evaluations periodically administered to participants in each program or event sponsored by the college, to assess the expectations of those participating and the degree to which those expectations were met.
- numbers of partnerships with other organizations or agencies in a given year, together with descriptive statistics such as the number of individuals served through such partnerships, their geographic extent, or their total dollar value.
- internal audits of the institution's response to a selected sample of stakeholder requests—for example, to initiate a new program, to offer a new service for students or community residents, or to engage in a partnership or joint venture. Such audits should examine both the time required to respond and particular organizational obstacles encountered in attempting to do so (see the discussion of organizational performance in chapter 5).

# 5

## NEW DIRECTIONS IN EFFECTIVENESS

The core indicators presented in the previous chapter define an appropriate bottom line for demonstrating community college performance. They by no means set a limit on what might be measured to *improve* performance. In particular, institutions may want to examine how they function as organizations responding to new needs and changing conditions, in order to ensure their viability and vitality. It may not be enough, for example, to measure student achievement and progress and simultaneously create a market niche. An institution's effectiveness package will need to contain indicators that measure not only what students accomplish but also the college's response to what external stakeholders need and expect and how satisfied they are with what they get.

In responding to external stakeholders, an institution should focus on collecting information about itself to ensure its continuing viability in a changing world. For the most part, these data will not be reported to anyone outside the college and almost certainly will vary from institution to institution.

The core indicators omit many items that, for better or worse, institutions of higher education are increasingly being asked to measure in the name of accountability. Most of these are elements of organizational functioning centered on the efficient use of resources. Colleges also need to focus on finding ways to deal with inappropriate or poorly constructed measures that outsiders may contemplate imposing on the institution.

### NEW DIRECTIONS FOR ASSESSING ORGANIZATIONAL PERFORMANCE

If community colleges are to continue as high-performing institutions in the future, they will need to address key aspects of organizational functioning. Although the following features do not constitute effectiveness in and of themselves, they are examples of important dimensions of organizational performance for community college leaders to monitor—either as causes of or as proxies for quality.

**1. Ability to accommodate multiple and innovative modes of instructional delivery.** Responding appropriately to a growing variety of client demands requires community colleges to become increasingly flexible in their modes of instruction. The days are gone when institutions could simply offer instruction on fixed weekly delivery schedules and a standard term-based academic calendar. At the same time, new modes of instructional delivery that promise to increase student learning productivity are becoming more feasible and can be widely adopted. Among these are competency-based learning and credentialing systems, collaborative learning approaches, service learning approaches, problem-based models and simulations, and self-paced or asynchronous learning designs (often delivered at a distance through technology). These developments will require colleges to develop organizational structures that facilitate innovation in instructional delivery. Institutions cannot be burdened with administrative procedures that slow their ability to implement innovations. Such outdated procedures include time-consuming internal course- and curriculum-approval processes; faculty reward systems, registration procedures, or academic accounting procedures that force course offerings into a term- and credit-based format; or simply the attitude that any new way to deliver instruction is “special” or exceptional.

Constructing indicators of an institution’s capacity to accommodate new modes of instruction might proceed at several levels. At the most basic level, the college might monitor the proportion of total instructional activity (measured in credit equivalents or enrollment) that is accounted for by nontraditional scheduling or delivery formats. At a second level, it might examine the rate of change: If the proportions are increasing rapidly, there are probably few organizational barriers to implementation. Following the logic of Core Indicator 14, Responsiveness to Community Needs, a third level might be to examine the average time required to gain internal approval or implement new instructional approaches, tracking innovations from concrete proposal to the point at which the application is up and running. Finally, the institution might employ an audit approach and systematically examine the particular organizational barriers, incentives, and disincentives that affect a selected set of innovation initiatives.

**2. Information and planning resources.** Rapidly changing environments will place increasing burdens on an institution’s capacity to generate sound management information and to plan for the future. As many corporations have found, adequate information capacity is one of the most important ways to

ensure vitality in uncertain times. Information and planning resources are needed to gain intelligence about trends in the external environment, and this knowledge, in turn, may give the institution an advantage in constructing and deploying new programs quickly (or in avoiding expensive mistakes). Equally necessary are the information and analytical resources required for the institution to monitor its own performance and to undertake continuous improvement. Prominent here are outcomes assessment, measures of stakeholder satisfaction, and indicators that examine key internal management and support processes. In all these areas, high organizational performance demands more than just a stock of data. Information must be widely accessible to staff throughout the organization, and it must be prominently and regularly used in the decision-making process.

Constructing indicators for an institution's information and planning capacity might also occur at multiple levels. A first step might be simply to examine investments in this capacity—items such as administrative computing, data acquisition and environmental scanning, and institutional research and planning—as a percentage of the total operating budget. A good benchmark might be 2 percent to 5 percent of total expenditures, the standard commonly applied in industry for research and development.

At the next level, the adequacy of available information and analytical resources can be assessed through analysis of the institution's ability to efficiently produce useful analytical statistics from its current array of data. Can the institution readily calculate such multifaceted performance indicators as the percentage of first-term students taught by part-time instructors, the probability of a given first-term student being enrolled in a class with fewer than 20 students, or the performance of remediated students in their first subsequent class requiring proficiency? A third level might examine information access by documenting how and how easily a given member of the community might obtain such data.

Finally, the actual use of information in decision making might be best determined by an audit approach. Here, particular decisions might be selected and examined systematically to determine the kinds of information made available and considered, or regular internal communications (memos, newsletters, meeting minutes) might be scanned to determine if they contain relevant data or references to data.

**3. Asset maintenance and development.** The core concept of effectiveness rests on an institution's ability to accomplish valued purposes related to both its mission and its stakeholders through the appropriate use of its resources. But a purely outcome-based definition of effectiveness may miss the fact that high



rates of “production,” in the short run, can be attained by stopping investment in key assets. Indeed, this is often what happens in periods of funding shortfall: Roofs don’t get patched, equipment doesn’t get replaced, and faculty and staff development efforts may cease altogether. Allowing such assets to depreciate is rarely good practice in the long run and will ultimately diminish the institution’s performance on core outcome measures. Renewing key assets on a regular basis effectively positions the institution to accommodate important changes in technology and to quickly adopt new instructional or administrative practices that may result in significant long-term improvements in effectiveness.

Constructing indicators that address effective stewardship of key assets is usually straightforward. Most such measures are defined as ratios between the current value of an asset and the amount that the institution spends annually to maintain or to renew it. Examples include the ratio of annual expenditures on facilities repair and renewal versus the current replacement value of the physical plant (usually benchmarked at about 2 percent); the ratio of annual expenditures on equipment versus the total book value of current equipment (usually benchmarked at about 10 percent to 15 percent); the ratio of annual expenditures on faculty and staff development versus total personnel compensation; or the percentage of the total course inventory in a given program represented by newly developed or redesigned courses (a measure of curriculum renewal).

Measures like these are never adequate in and of themselves to demonstrate institutional effectiveness. But it may be important for an institution to construct and monitor such measures because they portray organizational factors that are demonstrably related to achieving high performance.

### “RED LIGHTS” IN PERFORMANCE ASSESSMENT

At the other end of the spectrum are some “red-light” dimensions of organizational functioning that have proved extremely popular with external constituencies but that do not appropriately reflect institutional effectiveness as we have defined it. Direct measures of efficiency tend to dominate here and reflect a desire to shape or control institutional behavior. In discussing such approaches, it is important to stress that effectiveness is about outcomes, not processes. The most effective organizations distribute day-to-day management responsibilities to the lowest feasible level and hold local managers largely responsible for outcomes. As long as specified results are achieved on time and within cost, managers should be given the freedom to deploy institutional resources as they see fit. At the very least, when red-light measures are suggested, those proposing them

should be reminded that directly mandating institutional behaviors is not likely to achieve high performance. This argument will not prevail in difficult political circumstances; therefore, it is important to be aware of the specific pitfalls of some of the most common red-light measures:

**1. Faculty workload.** Direct measures of faculty workload are now common for many public colleges and universities. This trend reflects a number of external concerns. One (less applicable to community colleges than to four-year institutions) is the contention that faculty should spend more time on teaching. Underlying this sentiment is a general public perception that faculty don't spend much time on any one part of their job. Demands for greater efficiency will always lead to the faculty—if only because faculty time is the dominant resource at all institutions.

But measuring faculty workload is a tricky business. A primary concern is what to count as work. The most common workload measures tend to look at ratios between faculty numbers and teaching outputs like numbers of students taught or student credit-hours generated. These are pure productivity measures, though, and may or may not reflect real faculty effort. An instructor who teaches classes with 50 students looks twice as productive on such measures as one who teaches classes of 25, but is the first instructor really working twice as hard? Both must design and deliver the same number of class sessions (though, admittedly, they have different numbers of assignments to grade).

Alternative measures tend to look at the number of courses or sections taught—an approach that ignores many critical functions that faculty provide, such as advising students, designing new programs, or engaging in public service. A third common approach tries to measure time allocations directly through surveys of faculty activity. Such surveys are notoriously unreliable because individuals may differ in how they report particular kinds of tasks.

When faced with these three alternatives and forced to make a decision, community colleges are probably best advised to adopt the first approach. But in doing so, they should make it clear that the resulting statistic can only be interpreted as an overall institutional efficiency measure, not as a measure of faculty work.

Two additional issues are likely to affect discussions of workload: part-time instructors and the use of technology. Concerns about quality often stimulate mandates to measure the proportion of instruction generated by part-time faculty. This measure may be inappropriate for a community college, because the use of part-time professionals is a key ingredient in many occupational or technical programs. In other programs, part-timers may be as well or better prepared

than their full-time counterparts. Technology also muddies the waters with respect to workload. In distance-delivered courses, for instance, a single faculty member may reach hundreds of students with the same lecture. At the same time, other faculty may be “coaching” students individually through computer-based skills-development modules in which students move at their own pace and don’t generate traditional credits. Such situations are becoming increasingly common and promise to increase substantially in coming years. Capturing them effectively as part of any traditional faculty workload measure is virtually impossible.

**2. Instructional costs.** As emphasized in chapter 2, being cost-effective is a legitimate component of overall effectiveness. This implies that community colleges should examine instructional costs as a part of their internal management systems. Using cost statistics alone as direct measures of effectiveness for external accountability purposes, however, raises numerous issues.

Because faculty instructional activity is the biggest “factor of production” in community college teaching, most instructional cost measures are really variants of faculty productivity measures. Outputs are typically counted in the form of credits generated or students taught; costs, in turn, are counted in terms of the salary dollars allocated to the faculty member teaching each course. The principal difficulty here is that faculty salaries vary considerably based on factors that have nothing to do with productivity, especially seniority and market factors associated with hiring and retaining faculty in particular academic and professional fields. Institutions with a particular disciplinary mix—for example, one focused on healthcare and technology training—may have naturally higher costs than those teaching a different array of fields. The approach of using cost statistics also ignores the increasing importance of technology and instructional equipment in community college teaching. Directly accounting for all such costs in relation to instructional outputs can be a formidable task and will most likely amplify the effects of differences in disciplinary mix. Indeed, one of the most pernicious effects of pure efficiency measures is that they may induce institutions to stop offering instruction in fields that involve substantial equipment and technology investments, such as engineering technology or healthcare. Such fields may be precisely the ones most needed for the future.

**3. Degrees granted.** The total number of degrees granted by an institution has also been prominently advanced as a measure of community college effectiveness. The concern here is the same as that motivating the use of retention-rate and completion-rate statistics: that two-year colleges are not producing sufficient

numbers of program completers given the numbers of students they enroll. The misleading assumption here is that degree production is the only business that community colleges should be in. While program completion may be important for some students who enroll, it may not be a goal of many others. One approach to addressing this problem is to survey incoming students to determine their actual goals. If degree-granting statistics are mandated for community colleges, information on student goals should also be collected and supplied. A second way to address the problem is to emphasize statistics related to the completion of other goals. With the continuing development of competency-based instructional alternatives, certification of achievement or mastery may become increasingly common. Reporting the number and proportion of students completing such “intermediate” products (more than a course but less than a degree) may also help mitigate the negative message for community colleges that is always implied by pure degree-production statistics.

**4. Time to degree and “excess” course-taking.** A final accountability issue for all colleges is the time it takes students to attain a degree. More particularly, external authorities are concerned about students taking what appear to be more courses than necessary to complete a program, thereby blocking access for others. For community colleges, time-to-degree measures like this should be particularly resisted. We know that substantial numbers of students enrolled in community colleges complete degrees many years after they first enroll. This is because the pressures of work and family require them to attend part time or to interrupt their enrollment with “stop-outs.” Serving such students is what community colleges are, in large part, about. Imposing a full-time student model not only ignores the needs of such students but encourages open-access institutions to ignore them as well. Part-time attendance and stop-outs are largely outside an institution’s control. If excessive time to degree were simply a matter of students not being able to find the courses they need, a case for an appropriate accountability measure could be made. This is rarely a problem at community colleges, as demonstrated by student satisfaction measures like those described in Core Indicator 1, Student Goal Attainment.

Excess-credit measures face similar problems because course-taking is, again, largely a matter of student choice. Degree completion is rarely the only objective of a student who enrolls in a community college. Many decide on a degree only after having completed a number of courses. Others will take courses because of particular interests or job-related needs, even though the courses are not required for program completion. Finally, available statistics do

not suggest that excess course-taking is a particular problem for community colleges. On the most commonly used measure—the ratio of total credits actually completed by program graduates versus the number required for program completion (usually called a “graduation efficiency index”)—two-year colleges generally show greater than 90 percent efficiency. Statistics on excess course-taking should not unduly concern most community colleges.

## SUGGESTIONS FOR RESPONDING TO EXTERNALLY IMPOSED MEASURES

External authorities are becoming increasingly active in imposing direct measures of organizational performance on community colleges, in large part because of concerns about cost and accountability. As a result, virtually all community colleges will encounter occasions when such measures are advocated. The following suggestions may be helpful to a community college faced with this situation:

- 1. Lead with the proposed core indicators.** The core indicators were constructed around a model of institutional effectiveness that is appropriate for community colleges and is supported by experience. Based primarily on outcomes, they focus on what stakeholders really want from the institutions they invest in. Actively leading accountability-related discussions by emphasizing the core indicators demonstrates that an institution is willing to be held accountable. At the same time, it helps direct attention away from many areas of institutional functioning that should be a matter of internal management discretion.
- 2. Suggest alternative approaches to examining organizational performance.** If outcomes are the real bottom line of institutional effectiveness, only those areas of organizational functioning that are demonstrably related to outcomes should be considered. If external authorities insist on measuring organizational functioning, they should be reminded that concepts such as organizational flexibility and responsiveness, internal information resources and quality assurance processes, and the stewardship of key assets are the appropriate areas for a 21st-century institution to look at. More important, community colleges should be able to demonstrate that they are already looking at these matters internally and are making continuous improvements based on what they find.
- 3. Actively participate in the process of defining measures that reflect the realities of community college clientele and operations.** In these days of high accountability, living with some kind of performance indicator system is unavoidable. When

such measures are proposed, the appropriate response should be to actively work with established authorities to make the resulting measures as good as they can be. Active resistance to measurement from the outset will only increase pressure in return and will most likely result in the eventual imposition of poorly constructed measures. Even the most narrow and inappropriate of proposed measures usually can be modified to take into account the particular environment within which community colleges operate and the principal clientele they serve. Often those who advocate inappropriate measures do not know the service market that community colleges work in and how different it is from that of four-year colleges. Faced with persuasive arguments, authorities may be quite willing to accept alternatives that meet the basic intent of accountability.

**4. Beware the unaccompanied number.** No matter how well constructed, statistical indicators are always open to misuse and misinterpretation. As a result, colleges are well advised to report such statistics together with additional information that helps explain why the reported numbers look the way they do. Often this information will consist of facts demonstrating that higher levels of performance have actually been achieved. For example, three-year program-completion rates as mandated by Student Right-to-Know legislation should always be supplemented by program-completion rates at four, five, six, or more years. Such information may consist of additional breakdowns or disaggregations of the reported statistics. An institution may want to show that its instructional costs appear high in terms of total dollars per credit hour because it offers an unusually high proportion of technology-intensive programs that its stakeholders want and need. In other cases, the accompanying information may consist of important contextual descriptors of the population served—emphasizing, for instance, that the college's student body contains high proportions of first-generation, underprepared students or students whose primary objective is not to seek a degree. Almost always, the information that a community college supplies should be accompanied by statements that describe its implications for action, together with what the institution plans to do (or is already doing) to address those implications.

External demands for information are, admittedly, unpredictable and sometimes unreasonable. Indeed, about the only prediction that can safely be ventured is that such demands will increase markedly in the years to come. By taking a proactive stance in responding to such demands—admitting their legitimacy and helping to move the resulting discussions in a more appropriate direction—community colleges can demonstrate their effectiveness and, at least in part, avoid being unfairly judged.

# 6

## NEXT STEPS: A PLAN FOR ACTION

The changing world of effectiveness evaluation is a mirror of the unprecedented change going on in higher education. Market share is moving away from the ponderous, the inefficient, and the unaccountable, and toward institutions that focus on and deliver services that meet customer needs. The accountability movement presents an interesting challenge to community colleges. In the natural course of operations, it will push colleges to accomplish what they are not yet ready to do. It also provides colleges with an unparalleled opportunity to clarify their mission for policymakers and to better align their programs and services with the needs and expectations of their communities.

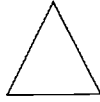
Our colleges can respond in many ways. One response is to make effectiveness a strategic weapon for demonstrating accountability, that is, to view it as a vehicle for achieving success in a turbulent market by documenting performance in ways that meet or exceed stakeholder expectations. If colleges are to move in this direction, leaders must act now to demonstrate the effectiveness of their institutions. We recommend the following actions:

1. Collaborate with college stakeholders, both internal and external, to determine their needs and what they expect from the college.
2. Update the college mission statement to reflect stakeholder needs and expectations.
3. State the mission in language that lets the institution assess performance.
4. Identify a few key performance indicators that demonstrate mission attainment and, using these measures, assess institutional responsiveness to stakeholder needs. Trying to measure everything diffuses an institution's focus on important priorities.

5. Set benchmarks or standards for each performance indicator.
6. Develop systems for collecting and analyzing performance data.
7. Use assessment data to enhance decision making and to inform stakeholders.
8. Keep the assessment process simple and flexible.
9. Be clear in the presentation of data; avoid jargon.
10. Put performance in context. Submit data on indicators with crisp, coherent, factual information focused on institutional mission and clientele.
11. Be proactive; do not wait for quality measures to be imposed on your college.
12. Establish financial resources and internal management systems to support a performance evaluation process.

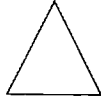
The question for community colleges is no longer “Should we be accountable?” but “How can we best take advantage of the current emphasis on accountability and performance to demonstrate the responsiveness and effectiveness of our colleges?”





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