

AN ABSTRACT OF THE DISSERTATION OF

Anthony E. Beebe for the degree of Doctor of Education in Education
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Community Colleges: Enduring Mission or Fading Vision?

Abstract approved: _____

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Community colleges have long been thought of as the "people's college." For some thirty years, Oregonians have looked to their 16 community colleges as the less expensive, more accessible route to a college education. Oregon's community colleges have traditionally had the broad mission of providing comprehensive educational opportunities to all adults who can profit from the instruction. This foundation of open access, however, has recently been challenged. Issues in Oregon's social, political, and economic environments the past few years have resulted in substantial financial pressure on the community colleges. This situation has prompted many Oregon community college leaders to make tough operational decisions. Rightsizing strategies encompassing all budget categories have been extensive across the state. In many cases, community college leaders have been able to manage decline successfully, maintaining the institution's broad mission. In other cases, however, leaders have selected strategies in direct conflict with the

ABSTRACT OF DISSERTATION (Continued)

stated mission of open access. The purpose of this study was to evaluate the consistency between the rightsizing behavior of Oregon's community college leaders and the community college mission of open educational access. The study employed a Tylerian objective-oriented evaluation methodology as a theoretical framework. In general, this approach compares the consistency between expected behaviors based on stated goals and demonstrated behaviors as measured via survey instrumentation. Frequency and statistical analyses were employed to address specific research questions developed to guide the study. Overall, there were substantial findings supporting the conclusion that Oregon community college leaders, in both past and planned rightsizing behaviors, were acting consistently with the mission of open educational access.

The "Open Door" of Oregon's Community Colleges:
Enduring Mission or Fading Vision?

by

Anthony E. Beebe

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I understand that my dissertation will become part of the permanent collection of Oregon State University libraries. My signature below authorizes release of my dissertation to any reader upon request.

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Anthony E. Beebe, Author

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DEDICATION

*This dissertation is dedicated to
my life's love and companion,
Carolyn Beebe,
and to the loving memory of my father,
who so uncommonly, unselfishly, and unconditionally
looked after us all,
Antonio Beebe
(March 3, 1917 – February 18, 1993).*

THE "OPEN DOOR" OF OREGON'S COMMUNITY COLLEGES: ENDURING MISSION OR FADING VISION?

CHAPTER 1 PROBLEM STATEMENT

Introduction of Problem

One of the greatest freedoms Americans hold is the opportunity to develop to their fullest as human beings. Certainly this is a lifelong process and commitment, promoted through educational opportunity. Educational observers have referred to community colleges as the "people's colleges" because of their contributions to human development and accessibility to the masses. Historically, these colleges have stood ready to provide educational opportunity to all adult learners who can profit from the instruction. Open access to the general populace is the most central, most compelling, and most distinguishing mission of the American community college system.

Oregon's community colleges also have as a primary mission open access to educational opportunity. For some thirty years, Oregonians have looked to their 16 community colleges as the less expensive, more accessible route to a college education. Open access and low cost have been the hallowed foundation of Oregon's community colleges. This long established foundation, however, has recently been challenged. Issues in Oregon's social, political, and economic environments the past few years have resulted in

substantial financial pressure on the community colleges. A broad sampling of related issues include the November 1990 passage of Ballot Measure 5 (a property tax limitation); voter disdain for any form of sales tax; an under funded mandate for educational reform; increased demand for fiscal and program accountability; changing community college state funding formulas; major reductions in four-year college and university general fund budgets; and trends towards a more centralized community college state governance. Because these and other issues can negatively impact financial resources, tension is created between the pursuit of the traditional community college mission and the allocation of scarcer financial resources. This situation has prompted many Oregon community college leaders to make tough operational decisions. Discussions with several Oregon community college business officers indicated that retrenching and rightsizing strategies have been extensive across the state. These officers reported that many college leaders have managed decline successfully, maintaining the institution's broad mission. In other cases, officers indicated leaders selected strategies in direct conflict with the open access mission. The purpose of this study was to evaluate the consistency between the rightsizing behavior of Oregon's community college leaders and the mission of open educational access. The broad study problem addressed was whether leadership behaviors were congruous with the open access mission. Specific research questions addressed in the study were as follows:

- (a) What rightsizing strategies have Oregon's community college leaders employed to cope with the changing environment?
- (b) What rightsizing strategies do Oregon's community college leaders plan to employ to cope with the changing environment?
- (c) How do Oregon's community college leaders rate rightsizing options in terms of the strategies' impact on educational access?
- (d) Is there consistency between the behaviors of Oregon's community college leaders as indicated by past and planned use of rightsizing strategies and the leaders' strategy ratings relative to the impact on educational access?

This research report consists of five chapters. Chapter one presents the research purpose and problem. The chapter also details the problem background, reviewing the antecedents and importance of the community college access mission. The state of financial affairs is also discussed for Oregon's two-year college system. The chapter concludes with an outline of the study's operational definitions. Chapter two reviews the relevant literature of decline management and presents a rightsizing taxonomy for organizing the strategies. Strategies discovered in the literature review formed the basis of the research survey instrumentation. Chapter three details the study's research methods and procedures. The chapter describes the study's design, population, instrumentation, and data analysis. Chapter four presents data collected in the study and their analyses as related to the four research

questions. Finally, chapter five reports study conclusions and recommendations and outlines possible implications for professional educational practice.

Background of Problem

The Roots of Oregon's Community College Mission

George Santayana wrote in Little Essays (1920) that, "The tide of evolution carries everything before it." Certainly this is true of the evolution of community colleges. The roots of Oregon's community college mission are found in the evolution and development of all of higher education. The community college mission is an outgrowth of deficiencies in early post-secondary education and reflects changes in societal, political, cultural, and economic environments. Consequently, there is substantial merit to reviewing the antecedents of the community college mission. This historical review places the mission of community colleges in context and establishes the importance of open educational access for Oregonians.

In ancient times education was for the wealthy classes of society. Its primary mission was to promote the ruling of others (Clark & Neave, 1992). Some attained education for self-improvement and intellectual curiosity, but this was a luxury. What little pragmatic education was available, such as rudimentary reading, writing, and calculating, was reserved for slaves. Such

basics equipped chosen slaves to perform their jobs and serve their masters better. Over time, as private universities spread throughout Europe, elitist education became a bit more utilitarian, focusing on training clergymen and teachers (Westmeyer, 1985, p. 120). However, there were no public colleges or universities of any kind.

The first college in America was Harvard College. The Puritans opened Harvard in Boston in 1636 exclusively for studying Puritanical practices and preparing clergymen who could promote the Puritan cause. After Harvard, other private colonial colleges emerged, respectively, The College of William and Mary (1693), Yale College (1701), Princeton (1748), and so on. Of these early colleges, Harvard, William and Mary, and Yale were avowedly denominational. Accordingly, the colleges strictly limited admission to members of sponsoring faiths. Only Princeton allowed persons of any faith to enter its student body. Albeit ever so slight, this was the first opening of the educational door to a more "diversified" student population. As the remaining colonial colleges came to be, they too were progressively liberal, admitting a greater and greater diversity of students (Westmeyer, 1985, pp. 7-13). This was not to say elitism had vanished; nothing was further from the truth. Among the "elite," however, greater numbers were being admitted to college. Overall, the general public had little idea of the goings-on behind the ivy covered walls of these early institutions (Cohen & Brawer, 1989, p. 20).

Several legislative actions helped inspire a democratization and demystification of higher education. Two of particular significance were the Morrill Act and the GI Bill. The Morrill Act of 1862 provided land grants to states (30,000 acres of federal land to each state for each senator and representative) so they could endow colleges specializing in mechanical and agricultural arts, in home economics, and in applied programs. The "State College of Oregon" (now known as Oregon State University) was founded in 1868 under authority of the Morrill Act. It was the state's first effort to provide publicly supported post-secondary education. Although the Morrill legislation, itself, did not promote vocational education, it was an important step toward creation of more practical education. The land grant colleges spawned by the Morrill Act contributed greatly to a pragmatic educational philosophy, leading to the training of scientists and other specialized professionals. This vocational/technical orientation was early fodder for the community college mission.

The GI Bill of Rights (more formally, "The Servicemen's Readjustment Act--Public Law 346) was passed into law by the 78th US Congress on June 22, 1944. Overall, more than 7.8 million World War II veterans availed themselves of its educational opportunities to attend college. The GI Bill mitigated the social and financial obstacles, which in earlier times foreclosed the general population's participation in post-secondary education.

Of all institutions of higher education, community colleges contributed most to opening the post-secondary system to the general populace (Cohen & Brawer, 1989, p. 20). Community colleges grew out of educational reform efforts during the turn of the twentieth century. At that time, leading educators wanted universities to concentrate on "higher-level" studies, rather than expending resources on "lower-level" freshman and sophomore training. As for lower-level education, one model promoted was based on the German system. Under this system high schools picked up the training of college freshmen and sophomores. It was a hard sell; Americans were used to the system of 12 years of elementary and secondary school plus 4 years of college. Eventually, a completely new college emerged called the "junior college."

The junior college mission was narrow and succinct--prepare students for transfer to senior level colleges and universities. This satisfied university educators who wanted resources focusing on upper division and graduate training. Joliet Junior College was established in 1902 in Joliet, Illinois, as the first public junior college in the United States (Westmeyer, 1985, p. 100). By the end of the 1920s, junior colleges had grown to total 258 (Ratcliff, 1992, p. 16). As junior colleges caught on and spread across the country, so did the idea that they should broaden their mission. Besides providing lower division transfer education, the colleges began offering select vocational/technical training for those not interested in transferring to four-year colleges and universities. As it would happen, the vocational/technical programs were

hugely popular and eventually grew in comparable size to that of lower division transfer programs. The obvious demand for vocational/technical training prompted junior colleges to rethink their mission, more closely aligning themselves with community needs. This mission realignment led to a renaming of themselves to "community colleges" (Westmeyer, 1985, p. 101).

Following World War II, enrollments in community colleges soared. The G.I. Bill enabled the introduction of millions of returning veterans to higher education. The majority of these veterans wanted practical, vocational education. The community college with its vocational/technical programs was the ideal option. In the 30 years between 1948 and 1978, community college enrollment grew from 150,000 students to over 4 million (Pincus, 1980, p. 338). The idea of the "people's college" was in place. Enrollment was increasing exponentially with community colleges being built at a rate of one per week to serve the expanding numbers of students (Zwerling, 1980, p. 93).

In broad historical context, it is likely the initial community college mission evolved from a 1947 report of the President's Commission on Higher Education (better known as the "Truman Report"):

Whatever form the community college takes, its purpose is educational service to the entire community, and this purpose requires of it a variety of functions and programs. It will provide college education for the youth of the community certainly, so as to remove geographic and economic barriers to educational opportunity and discover and develop individual talents at low cost and easy access. But in addition, the community college will serve as an active center of adult education. It will attempt to meet the total post-high school needs of the community (Bogart, 1994, p. 62).

Early Oregon community college documents indicate educational leaders had no less a vision for Oregon's community colleges. One of the earliest documents, A Community College Plan for Oregon (the "Koos Report"), written in April of 1950, discussed the elements of the Oregon mission. Specifically, the report stated that "the new institution should be local and tuition-free and should offer a program broad enough to comprehend the needs and interests of all the population of early post high school age" (Koos, 1950, p. 1). From these early writings, observers can determine the important elements of Oregon's community college mission. They are local control, low cost (in this case, Dr. Koos argued for "tuition free"), and broad comprehensive programming. Although Koos presented the original Oregon community college plan in 1950, it was not until 1961 that a legislative body would codify these mission elements.

The Oregon Revised Statutes (ORS), Chapter 341, contain the Oregon laws relating to community colleges. ORS Chapter 341.009, Section 1, reads that "The community college is an educational institution which is intended to fill the institutional gap in education by offering broad, comprehensive programs in academic as well as vocational-technical subjects." Section 6 reads that "Admission to the college should be open to high school graduates or nonhigh school graduates who can profit from the instruction offered." Finally, Section 17 reads that "The cost of education to the individual should be

sufficiently low to permit students of low-income families to attend. This is particularly true of tuition costs.”

Financing the Community College Open Access Mission

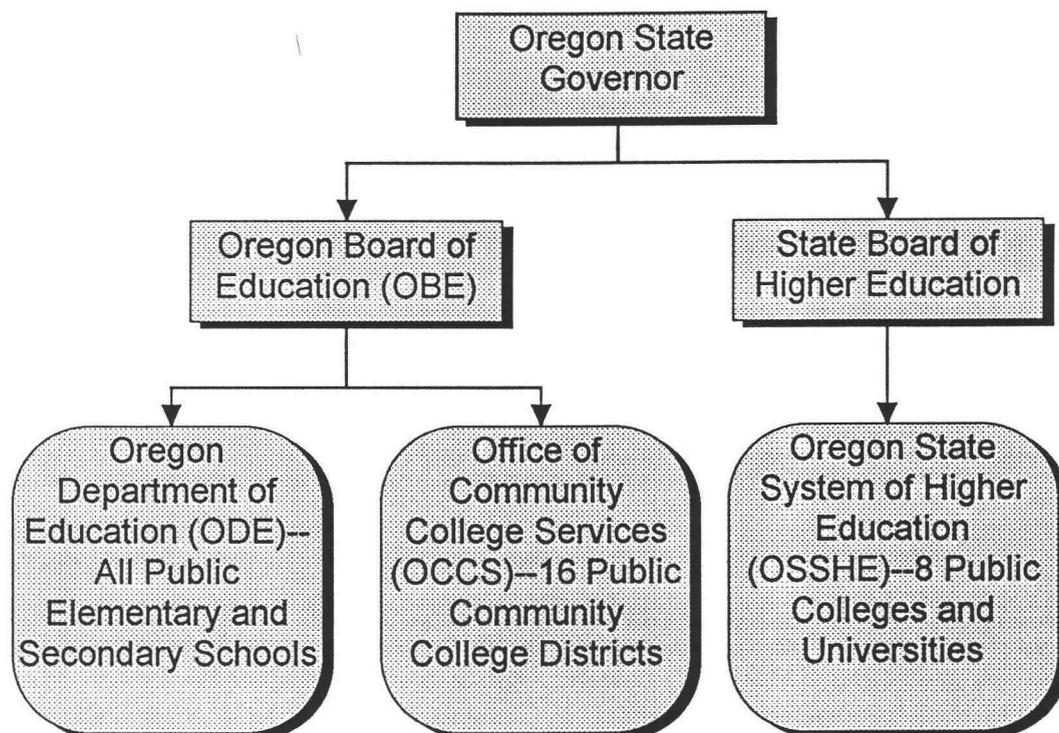
An institutional commitment to open educational access requires a sound financial foundation. Cohen points out that, “state policies and funding formulas in large measure determine patterns of curriculum, student access, and eventually outcomes” (1987, p. 20). Local property tax revenues and student tuition and fees are also important ingredients in the community college financial mix. Accordingly, to properly frame the subject research problem, it is necessary to outline the state of financial affairs for Oregon’s community college system. This section begins with a brief overview of Oregon community college governance and then describes the colleges’ revenue structure.

There is substantial history to the governance of Oregon’s community colleges. A detailed discussion of this history is beyond the scope of this report. However, one enduring concept of the system needs emphasizing--the idea of *local control*. Local control has been a fundamental touchstone for the state’s 16 community colleges since their enabling legislation in 1961. In fact, the Oregon Legislature did not actually create community colleges, but rather empowered local communities to create their own institutions (Garst, 1992, p. 7). Consistent with this, the Legislature permitted communities to exercise local control over these colleges through strong local boards of elected

citizenry. These boards have general policy making powers and authority and each appoints a president for day-to-day college administration. In Oregon, decentralization and local control are highly cherished interests of the state's community colleges.

Although local sovereignty has been (and is) strong in Oregon, the community colleges realized they also needed an effective coordinating agency at the state level. After considerable lobbying by the Oregon Community College Association (OCCA), the Oregon Legislature passed a bill in 1987 creating a separate Office of Community College Services (OCCS). OCCS has a separate commissioner who reports to the Oregon State Board of Education (OBE). Under this governance system, the OBE oversees both the Department of Education (kindergarten through twelfth grade, "K-12") and the OCCS. The Oregon State System of Higher Education (OSSHE) oversees the state's eight public four-year colleges and universities. This public educational governance structure is depicted in Figure 1. The OBE meets separately with the OCCS to discuss community college related business (Garst, 1991, p. 14). In this way the structure gives community colleges a separate "voice" from that of K-12.

Figure 1
Governance Structure for Oregon's
Public System of Education.



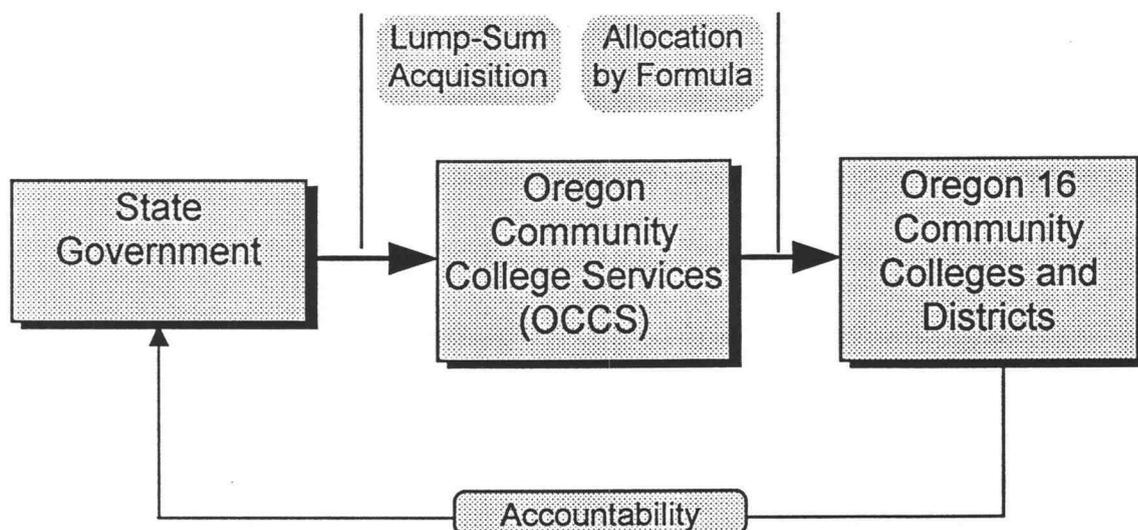
Like most in the nation, Oregon's community colleges have three primary revenue sources: (a) state appropriations of state general revenue funds; (b) taxes levied on property located within local districts; and (c) student tuition and fees.

State Appropriations

Historically, state appropriations have accounted for approximately 30% of total revenue sources for Oregon's community colleges. Figure 2 depicts the

flow of state appropriations to the community colleges. As the figure shows, the OCCS acts as a conduit or coordinating agency for the state's 16 community college districts.

Figure 2
State Funding of Oregon's Community Colleges



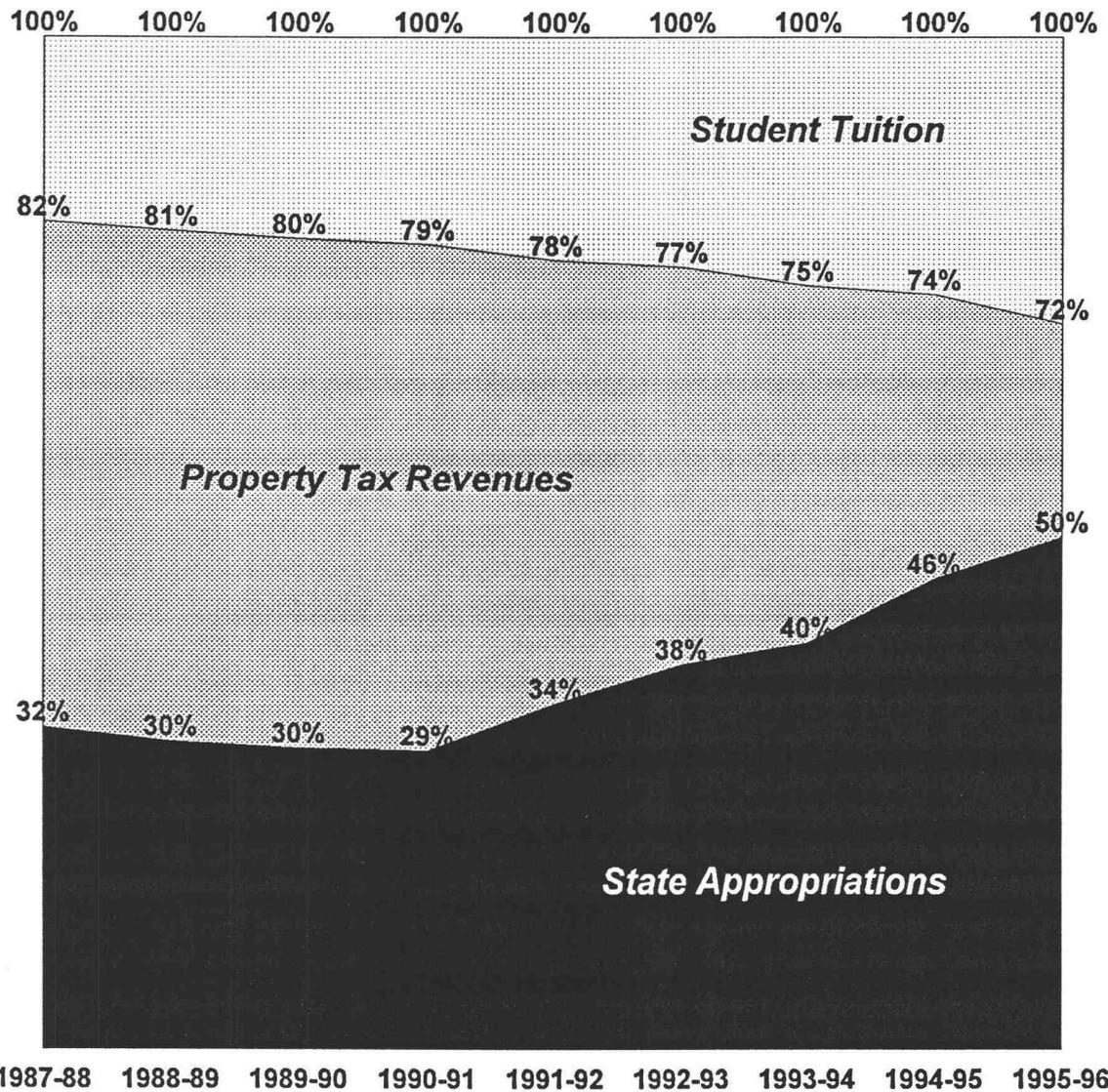
The OCCS facilitates the conduit function by presenting the community colleges' total requests for the coming biennium to the state Legislature through the Governor's state budget. The Legislature, after satisfying itself as to the necessity of the amount, appropriates a two-year lump sum for the colleges to OCCS. The total community college lump sum appropriation for the 1995-97 fiscal biennium was \$325.5 million. OCCS then allocates state appropriations among the 16 community colleges according to an established formula. Finally, the accountability loop depicted in Figure 2 represents a set

of funding commitments, both explicit and implicit, which the institutions are expected to honor. In the past this accountability loop has been minimal and the Legislature has provided funds with few strings attached. However, in recent years, accountability has taken on greater prominence.

As mentioned previously, state appropriations have typically averaged about 30% of total Oregon community college revenues. The percentage of appropriations of total revenue sources is shown as the black area in Figure 3. As indicated, appropriations hovered around 30% or so for fiscal years 1987-88 through 1990-91. This percentage climbs steadily and substantially to more than 50% in projected 1995-96. Conversely, local property tax revenues, shown as the dark gray area, represented about 50% of total revenue sources in fiscal 1987-88, dropping dramatically to only about 20% in projected 1995-96. The significance of this changing revenue composition is threefold: first, control tends to follow funding; second, community colleges are more susceptible to fiscal austerity; and finally, overall funding becomes less stable.

In terms of control, as a greater and greater portion of funding comes from the state, greater and greater power and control is relinquished to the Legislature and OCCS over college mission. In a state where the community college system has been founded and operated on local control, this is a significant trend. Traditional missions, formulated by local boards to serve local communities, can be materially compromised as colleges increasingly reliant on state funding endeavor to satisfy broader state goals.

Figure 3
 Revenue Resource Shares for Oregon's Community Colleges



Note. Projected starting from 1992-93. Source: Oregon Office of Community College Services, March 23, 1994.

The trend towards greater state, less local funding can also result in economic austerity for Oregon's community colleges. Oregon's state appropriation process for community colleges may be best described as a "revenue-sharing" system (Brinkman & Jones, March 1990). Under this system funds are dispersed to recipients based on revenues available--rather than the services provided, the cost of services, or the assets maintained by the recipient. In times of decreasing services and enrollments, this can work in favor of colleges. The reason for this is that funds are generally acquired as an incremental percentage over the prior biennium's base, again with no tie to services provided.

But in times of expanding services, if expansion rates are significantly greater than appropriation percentage increases, colleges are forced to operate at levels of austerity to maintain current services (McGuire, 1978). Typically, this happens at the worst possible times, when communities need college services most. This has been the case in Oregon (Rubenstein, 1995).

As a recent report by the National Center for Higher Educational Management Systems points out, the community college mission in Oregon is getting broader. This comes at a time when local property tax support is diminishing due to Ballot Measure 5 and state appropriations, as reflected in the current Governor's Budget, is \$11.5 million under "current service levels" (Garst, 1995).

Finally, in addition to loss of local control and increased financial austerity, the shift towards greater state reliance of funding in Oregon results in greater instability of the funding base. This instability comes from increased reliance on lottery moneys. Oregon, like many other states, has legalized state sponsored gambling (e.g., video poker, keno, powerball, scratch off tickets, etc.). Consequently, as a result of scarcer resources, the state has become increasingly reliant on these funds to finance services. This has been particularly true for funding education. For example, for the 1993-95 biennium, the Oregon Legislature approved a total of \$245.4 million for community colleges. Of this, \$133.1 million (the amount of the "Community College Support Fund") was state appropriations to OCCS for allocation to the state's 16 community colleges. The remaining \$112.3 million was "replacement revenue" lost as a result of Measure 5, a local property tax rate limitation (Garst, 1995). Of the \$133.1 million in state appropriations, only \$68.4 was from state general revenue funds. The remaining \$64.7 million was from state lottery dollars. Apart from the philosophical issues some have raised relating to funding education with gambling revenues, lottery dollars do not lend to a stable funding base. These funds are very fickle, fluctuating wildly with economic conditions, types of games offered, marketing budgets, Indian casino competition, etc. (Green, 1995). As a result lottery funds are difficult to rely upon as a permanent funding base. This makes strategic planning for educational services to Oregonians very difficult.

Local Property Tax Revenues

Each of the 16 community college districts has a local property tax base upon which to levy taxes. The ability of a college to raise revenues from its tax base varies considerably from one district to another across the state. The state's districts are quite diverse, not only in wealth, but in views on the importance of post-secondary education.

Historically, taxes collected from local property taxes have accounted for about 50% of total revenue sources for Oregon's community colleges. However, as discussed earlier this percentage has been decreasing rapidly since fiscal 1987-88 and is projected to be about only 20% in 1995-96. Under current state law, districts are allowed to increase tax bases by 6% without voter approval. In the past, this flexibility has provided a budgetary cushion in the event other funding sources fall short of expectations. Unfortunately, the flexibility of increasing property tax bases without voter approval has recently come under attack. Oregon Taxpayers United, an antitax special interest group, recently announced it will be placing a measure on the November 1996 general election ballot. This measure would cut property taxes by 15% in 1997 based on 1995-96 tax bills. Additionally, districts will not be allowed to increase property taxes more than 3% in subsequent years, regardless of assessment increases (Mayer, 1995).

Oregon voters are resolutely opposed to taxes of any kind, as demonstrated by passage of Ballot Measure 5 in 1990. This measure caps

property tax rates at \$15 per \$1,000 of assessed valuation. Although California passed similar legislation in its Proposition 13, Oregon districts have been particularly vulnerable to Measure 5 because of not having any sales tax to help diffuse some of the burden. Certainly Measure 5 is a primary catalyst for the percentage losses in local support depicted in Figure 3. The continuing dilemma for not only educational institutions, but all Oregon state and local agencies is that although an alternative funding source is needed, a sales tax does not appear to be the answer. Nine sales tax proposals of various structures and rates have been placed before Oregon voters--all have failed.

Student Tuition and Fees

Finally, student tuition has averaged about 20% of total community college revenues. With a strong form of local control, each of the colleges' Boards of Education establishes the amount of student tuition and fees. For the 1993-94 school year, average annual tuition was \$1,243 for three terms of 15 credits each. This was almost a 17.5% increase over 1992-93 at an average of \$1,058 for three terms of 15 credits each (Garst, 1994). Several colleges in the system have had to increase student tuitions as much as 30% in recent years in response to lost revenues due to Measure 5 and inadequate replacement by state appropriations (Secure colleges' future, 1992; Hill, 1991a; Hill, 1991b).

These tuition increases have a tremendous impact on Oregon students. A 1992 survey of community college students found that more than one in three students rated “cost” the primary reason for their attending the local community college. Recently, tuition at community colleges has become even more important to students struggling with educational costs. According to an article in The Oregonian, the Oregon State System of Higher Education is “the costliest in the Pac-10” because of the impact of Measure 5 (Danks, 1992). Typically, freshman and sophomore students pushed out of state colleges and universities because of increasing educational costs turn to Oregon’s community colleges. But when tuition at these institutions is increasing rapidly as well, many would-be students are simply foreclosed from access to any kind of post-secondary education in Oregon.

Operational Definitions of Terms

Community College Mission

“Mission” refers to the strategic objectives of the institution. Oregon’s community colleges have had a broad mission of providing comprehensive educational opportunities open to all adults who can profit from the instruction at a cost sufficiently low to permit low-income students to participate. Program comprehensives, open educational access, and low-cost are the quintessential elements of Oregon’s community college mission.

Open Educational Access

As Eaton (1994, p. 39) explains, “Access--the community college’s role as a democracy’s college--was and remains its central and most compelling feature.” In broad terms, educational access is the availability of educational opportunity. More specifically, educational access is comprised of four elements: (a) geographic, (b) financial, (c) academic, and (d) personal. Geographic access is when the community college is within commuting distance for students. Financial access relates to keeping the total cost (tuition, books, fees, parking, etc.) of an education within reach of comparatively low-income students. Academic access is realized when admission to both the institution and programs is permitted and sustained, even through periods of poorer performance, as long as overall the standards have been met. Personal access refers to the personalized nature of community colleges, to the use of nontraditional pedagogy, and to philosophy that the student will succeed (Eaton, 1994, p. 39-40). All four of these elements must be present to have unrestricted, open educational access.

Organizational Retrenchment

In the literal sense, the American Heritage Dictionary of the English Language (1981), defines retrenchment as “To cut down; curtail; reduce. To remove, delete, or omit. To curtail expenses; economize” (p. 1110). The

prolific use of the term “retrenchment” in the scholarly realm refers to a cutback condition or action (Riley, 1994). Retrenchment is a short-lived, purposeful managerial response induced to cut expenses and prevent a full-fledged organizational “decline.”

Decline

The term “decline” has two principal meanings in the organizational literature. In the first meaning, “decline” is used to reflect a substantial, absolute decrease in an organization’s resource base over a prolonged period of time (Guy, 1989, p. 44). Some have referred to this phenomenon as “environmental entropy,” the reduced capacity, for whatever reasons, of the environment to support an organization (Whetten, 1980, p. 360). This reduced capacity may result from social, political, and/or economic factors. “Decline” is also a term used to describe an internal state of an organization. In this sense, the term decline typically relates to a phase in an organizational life cycle model. At least one commentator has referred to this type of decline as “organizational atrophy” (Whetten, 1980, p. 355). This study employs the term “decline” as it relates to environmental entropy, rather than organizational atrophy.

Rightsizing Management Strategies

A “rightsizing strategy” is a deliberate action or set of actions developed and implemented by operational leaders of a community college to respond, either reactively or proactively, to environmental decline. Rightsizing, as used in this study, refers to the broad array of organizational strategies available to operational leadership to adjust to a changing environment. It encompasses not only retrenchment strategies, but additional ideas such as downsizing, upsizing, reengineering, reorganizing, restructuring, and reallocating. As Morris (1994) explains, “rightsizing is more often a sense of proportion or ratio than it is an absolute figure” (p. 46) and implies dynamic processes rather than a steady state. Rightsizing strategies may involve long-term incremental and decremental adjustment of mission elements. Rightsizing is a concept of scale and equilibrium relative to institutional means.

Community College Leaders

For purposes of this study, “community college leaders” are the primary college officers responsible for educational services, student services, and college services in one of the 16 Oregon community colleges.

CHAPTER 2 LITERATURE REVIEW

Introduction

The objective of this literature review is twofold: (a) to provide the reader with an overview of rightsizing concepts and (b) to establish a pool of rightsizing strategies upon which to ground study survey instrumentation. The discussion begins with an overview of related literature and then moves to conceptual definitions. A general rightsizing strategy taxonomy is then detailed. Next, specific examples and dynamics of strategies are presented. Finally, the chapter concludes by organizing examples and sources of strategies found in the review in the general taxonomy of strategies.

Overall, the body of literature on community college financial management describes the long-term relationship of the institution and financial exigency. This exigency has come about from periods of both growth and decline. Prior to 1980 the literature relating specific community college strategies for managing decline was very limited. Pragmatically, this is consistent with the developmental phase of the institution up to that time (Cohen & Brawer, 1989). Following World War II until the 1980s, there was a preoccupation with managing rapid growth, with organizations experiencing decline rather rare. The recessions of 1974-75 and 1981-82 heightened interest in managing organizational decline, particularly in higher education. More than 75 percent of all literature related to this topic has been published

after 1977 (Zammuto, 1987). In parallel fashion, Wattenbarger and Vader (1986) noted summarizing the trends of community colleges, the “expansionist 60s” gave way to a “gradual erosion” of the colleges’ finances in the 1970s. In the 1980s, America’s community colleges began to respond to ensuing financial shortfalls, introducing strategies to increase revenues and/or decrease costs.

Since the early 1980s, the body of literature on managing community colleges in austere financial times has grown considerably. Clearly though, researchers of decline management in four-year colleges and universities have been much more prolific reporting results than those of community colleges. Although the sheer volume of decline management writings has grown, much of the work has been anecdotal (Angel & DeVault, 1991; Blong & Bennett, 1991; Chabotar & Honan, 1990; DeCosmo, 1978; Morris, 1994; Wattenbarger & Vader, 1986; Zemsky & Massy, 1990). Reports of empirical findings on specific topics of “retrenching,” “downsizing,” “rightsizing,” “cut back management,” etc. have been scant for community colleges, again with studies relating to four-year colleges and universities more profuse (Ashar & Shapiro, 1990; Bruegman, 1989; Cameron, 1978; Cameron, 1981; Cameron, 1983; Green, 1992; Hyatt, 1984; Leitzel, Morgan, & Stalcup, 1993; Riley, 1994). Studies relating rightsizing strategies in higher education to the mission of open educational access have been very limited on all fronts (Collins, Leitzel, Morgan, & Stalcup, 1994; Fonte, 1993; Leitzel, Morgan, & Stalcup, 1993; Roesler, 1993). No studies relating rightsizing strategies and open access

were found using any aspect of Oregon community colleges as a study population.

Concepts of "Rightsizing" Management

"Rightsizing" is a relatively new term in the lexicon of organizational theory. Rightsizing does not appear readily in the literature of education or community college organizational development. However, the term expresses the concept of restructuring that many of the institutions are currently experiencing. In essence, rightsizing describes the dynamic of adjusting proportions of personnel, equipment, facilities, products, and services relative to revenues so as to maximize both organizational efficiency and effectiveness. As Morris (1994) explains, "rightsizing is more often a sense of proportion or ratio than it is an absolute figure" (p. 46).

The concept of rightsizing is a global one. It is much broader than the concepts of retrenching or downsizing. In the literal sense, "retrench," as defined by the American Heritage Dictionary, means "to cut down, curtail, or reduce"; "to remove, delete, or omit"; and "to curtail expenses, economize" (Morris, 1981, p. 1110). The prolific use of the term "retrenchment" in the scholarly realm refers to a short-term cutback condition or action (Riley, 1994).

"Downsizing" is a short-term concept similar to retrenchment. Downsizing was introduced into the English language during the 1980s, when large American corporations began flattening organizations by closing down

units and divisions that failed to contribute to the organizational mission as successfully as other units and divisions (Guy, 1989). A result of downsizing was that corporations laid off tens of thousands of personnel at all levels. The goal of downsizing was to reduce corporate costs, so companies might become more competitive. In their eagerness to downsize and cut costs, however, many corporations found themselves trimmed too zealously. Accordingly, they had to rehire personnel and restructure operations to regain quality. Chabotar and Honan (1990) refer to this rightsizing adjustment process in education as the "three R's of the 1990s: reorganization, reallocation, and reduction."

Rightsizing then, as used in this study, refers to the broad array of organizational strategies available to leadership to adjust to a changing environment. It encompasses not only retrenchment strategies, but additional concepts such as downsizing, upsizing, reengineering, reorganizing, restructuring, and reallocating. Factors contributing to a need to rightsize have generally been attributed to those originating externally to colleges.

"Environmental entropy" is a term describing the "capacity of the environment to support the public organization at prevailing levels" (Levine, 1978, p. 318).

Certainly this "support" comes in all forms, including social, political, and economic. A reduction of funding, however, is the driving force moving most public educational organizations to rightsize. In general, funding reductions occur in one or a combination of two ways:

- (a) An actual decrease in funding from state appropriations, local property taxes, student tuitions and fees, etc., and/or

- (b) A relative decline in the rate of growth in these revenue sources, so that inflation or other factors cause reduced real revenues (Waggaman, 1992).

Contentions of environmental entropy are supported by Campbell's (1982) findings involving over 37 institutions and over 100 administrators that the primary causes of financial stress were legacies from periods of growth, spiraling costs of inflation, and costs associated with government-mandated programs (Campbell, 1982a). McGuire (1978) also lends support to the impact of inflation in his research involving 39 states that "in all the states categorized as suffering from reduced resources, the actual appropriations for community colleges increased during the current budget year. The rate of increase, however, was well below the rate of inflation."

A Rightsizing Strategy Taxonomy

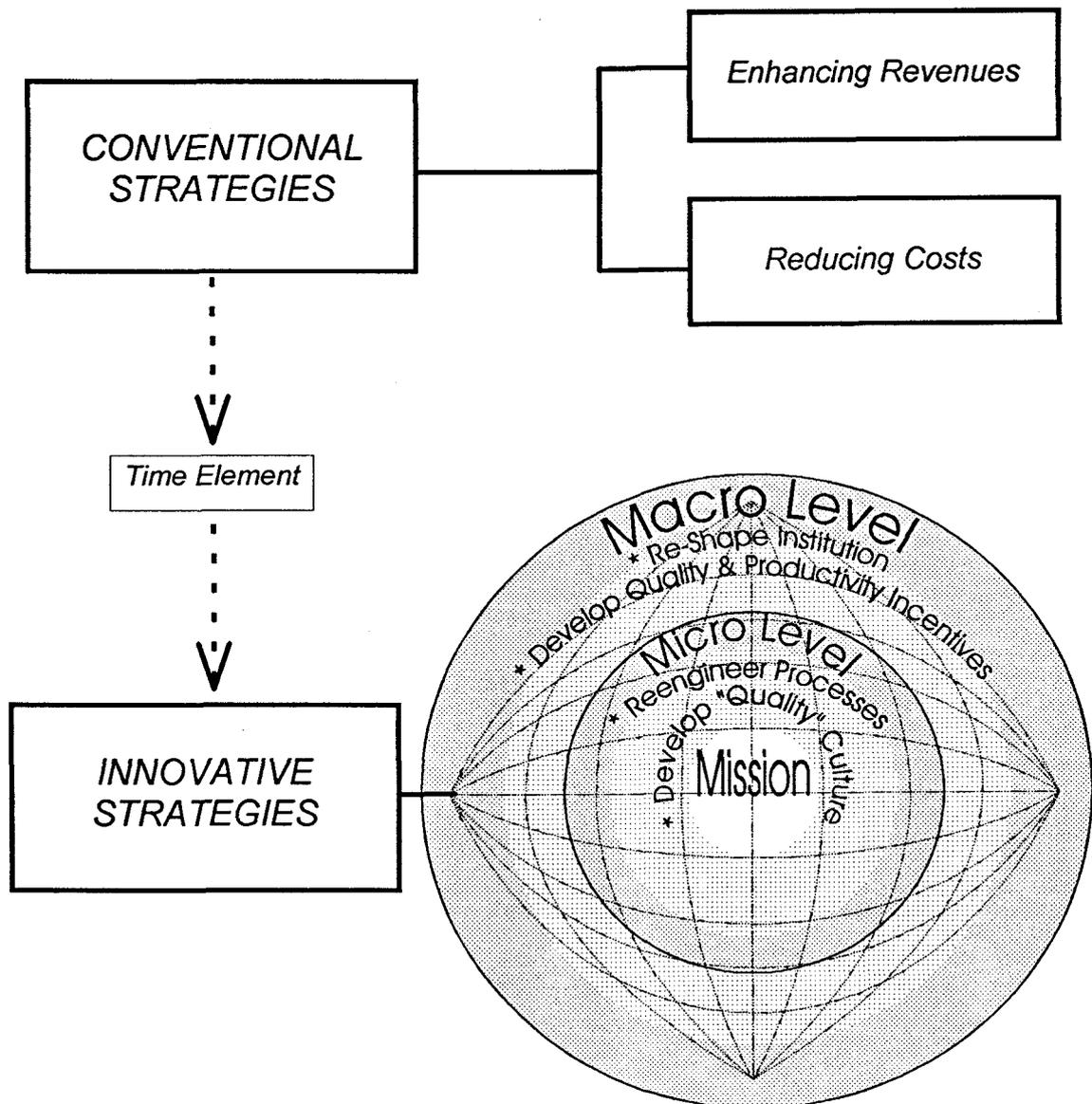
Rightsizing strategies are as numerous and diverse as the individuals creating and the organizations employing them. Nevertheless, several categories of strategies have been developed and are presented in the literature. Many of the categorizations employ a temporal component (Cameron, 1983; Hyatt, 1984; Meisinger & Dubeck, 1984; Pew Study Group, 1993). Wattenbarger (1986), for example, contends that one of the defenses of a particular strategy is based on expediency. In general, short-term strategies are those achieved in one to three years, focusing exclusively on cash flow.

Intermediate-term strategies typically focus on personnel policies where results can be expected in two to six years. And, finally, long-term strategies are those requiring three to nine years and which focus on completely reassessing program priorities (Riley, 1994).

The Pew Study Group on Restructuring (1993), through its case study research on the topic, has developed one of the most recent classifications of rightsizing strategies. In general, it is comprised of three broad categories. These categories are (a) shorter-term, efficiency related strategies such as revenue enhancements and cost reductions; (b) longer-term, "macro level" strategies affecting the institution as a whole; and (c) longer-term, "micro level" strategies related to individual units, such as divisions, departments, or programs. Riley (1994) adapted the Pew model in her research, integrating the broad categories of "Conventional" and "Innovative" strategies. An adaptation of Riley's model is presented in Figure 4. This adaptation provides a means of organizing and presenting specific rightsizing strategies and concepts discovered in this literature review.

Figure 4 depicts the two primary categories of rightsizing strategies: "Conventional Strategies" and "Innovative Strategies." Conventional strategies are those conservative approaches employed to enhance revenues and/or reduce costs. In essence, the central focus of conventional strategies is

Figure 4
Model of Progression of Rightsizing Strategies
in Response to Financial Constraints



Source. Adapted from Pew Study Group's model on Restructuring, 1993, and Vicki L. Riley's model, 1994.

organizational efficiency. On the other hand, innovative strategies have as their primary focus organizational effectiveness. Innovative strategies go beyond merely enhancing revenues, reducing costs, or reallocating the two.

Innovative strategies focus on issues of mission. They include "Macro Level" strategies relating to reshaping the organization and developing incentives for quality and productivity and "Micro Level" strategies relating to reengineering work processes and developing a "quality" culture. No doubt institutions doing a prudent job of rightsizing will employ some mix of both conventional and innovative strategies, as the situation warrants. But for purposes of clarity and analysis, delineation between the two sets of strategies has been made in this study, with time as a linking element.

Conventional and Innovative Strategy Relationships

Research has shown conventional, conservative strategies are a college administrator's first response to austere financial times (Cameron, 1981). Cameron (1983) suggests six reasons why administrators tend toward conservative, rather than innovative, approaches initially. First, educational administrators, accustomed to growth management, perceive conditions of decline as exclusively a resource allocation and/or efficiency problem. Accordingly, they look to more resources and greater efficiency as the fix. Second, conservative strategies are politically less stressful and risky than other more innovative approaches. There is simply less personal stress on administrators adopting more conservative measures. Third, there is a tendency toward nonaggressive, laissez-faire leadership in education consistent with attribution theory. This theory predicts that individuals tend to

attribute success (e.g., growth) to personal (internal) factors and failure (e.g., decline) to environmental (external) factors beyond their control. Forth, because colleges are structured as loosely coupled systems, governed by committees and autonomous subunits, development of innovative strategies is difficult and time consuming. Complete consensus from such a group is unlikely and resistance from special interest groups is almost assured. Fifth, many of the innovative, competent leaders stifled by the bureaucracy or frustrated by the system end up leaving. Thus, administrators wishing to employ innovative strategies have little support. Finally, "innovation," itself, is often viewed as a cause of decline. When resources are plentiful, innovation and nontraditional programs flourish. In decline, however, these very programs are viewed as financial burdens and are often the first to be eliminated. Institutions therefore retrench to more conservative, traditional programs, cutting nontraditional entrepreneurial programs.

Institutions move to more innovative strategies as time passes and it is found conventional strategies are unable to provide long-term financial stability or maintain desired quality (Pew Study Group, 1993). "Innovative strategies" are more substantial and far-reaching measures than those aimed at simply increasing revenues or reducing costs. The focus of innovative strategies is not exclusively improving efficiency, but includes reevaluating and/or changing the institutional mission, goals, and/or operations (Riley, 1994). Typically, innovative strategies are initiated after second, third, or subsequent rounds of

cuts have been made and when it is perceived no further discretionary items exist.

The remaining sections of this chapter provide narrative of specific examples of both conventional and innovative rightsizing strategies. The goal of the discussion is to present a conceptual sampling of strategies employed by institutions. It is beyond the scope and purpose of this review to comment on either the appropriateness or potential impact of any of the strategies presented.

Specific Rightsizing Strategies

Conventional Strategies

A great deal of the literature supports the notion that conventional strategies are the first strategies employed by organizational leaders in times of financial austerity (Angel & DeVault, 1991; Cameron, 1983; Campbell, 1982a; Hyatt, 1984; McGuire, 1978; Riley, 1994; Wattenbarger & Vader, 1986).

Conventional strategies are designed for short-term benefits and are directed specifically at enhancing revenues and/or reducing expenditures.

Enhancing Revenues

A recent survey shows that educational administrators have a preference for seeking revenue-driven responses before initiating any expense

cutbacks in austere budget conditions (Chabotar & Honan, 1990). This research also found that nine of the top ten "most successful" factors rated by college presidents in overcoming financial crisis were designed to increase revenues. Of all revenue strategies available, raising tuition and student fees is the most frequently cited first response (Riley, 1994). Certainly this appears to be the case in Oregon (Danks, 1992; Hill, 1991a; Rubenstein, 1995). The Collin et al. (1994) research lends support to the propensity towards increasing tuition, noting that of the 27 institutions responding to their survey, almost 90% had recently increased tuition and fees in response to decreased funding. Other fees, such as parking and athletic fees had been increased by 47.1% of respondents. And finally, "student activity fees" had been increased by 29.4% of the institutions (Collins et al. 1994). According to the national association of State Higher Education Executive Officers, the average community college tuition in the U.S. grew exponentially between 1982-83 and 1987-88. Overall, the nation's average tuition increase between 1982-83 and 1992-93 was 111 percent (Katsnas, 1994).

Beyond fees, a second set of general strategies for increasing revenues is to initiate or increase grant writing and fundraising development efforts (Campbell, 1982a). As Luskin and Warren (1985) point out, there are several ways colleges proceed in this area, but most strategies fit into alumni association activities, private giving and bequest programs, or corporate givings. Most college presidents consider these areas central to accomplishing the mission of their colleges (Campbell, 1982a).

Finally, a third general group of revenue enhancing strategies used by colleges relates to student recruitment. Increasing recruitment efforts is tied to the strategy of tuition management, with a greater number of students at even the same tuition potentially increasing revenues. Chabotar and Honan (1990) suggest in their research that there may be a contrary strategy in decreasing tuition to attract students. Of course, whether or not such a strategy would increase net revenues would depend on the elasticity of demand for community college services and the college's revenue/cost structures.

Reducing Costs

After revenue-driven strategies, the most frequently employed rightsizing strategies are those aimed at reducing expenditures (Angel & DeVault, 1991; Campbell, 1982a; Wattenbarger & Vader, 1986; Whetten, 1981). Campbell (1982) found that deferring building and equipment maintenance, postponing equipment purchases, and holding down faculty salaries were the most commonly used short-term approaches. Additionally, he cites cutting budgets for travel, supplies, library books, and leaving vacant positions empty as prevalent strategies used by college leaders. Angel & DeVault (1991) state that across-the-board cuts are also a frequent first response to financial austerity. McGuire's (1978) research supports these first response findings and adds the hiring of more part-time faculty and an increasing of student/faculty ratios.

Once the first few rounds of cuts have been made and discretionary expenditures have been eliminated in noninstructional areas, strategies typically move to reductions in courses and programs. It has been found that some of the first specific courses to go are chemistry, computer programming, and physical education (Leitzel et al. 1993). In terms of program offerings, research shows that community colleges tend to "retreat" to traditional two-year transfer and vocational offerings, eliminating nontraditional programs first (DeCosmo, 1978). Leitzel et al. (1993) found in their research that culinary arts, dietetics, dental technology, and hospitality management are some of the first nontraditional programs eliminated.

Finally, when all perceived "fat" of any kind has been cut, educational administrators typically move to methods to reduce labor costs (Green, 1992). Full-time staff and support services are usually the first areas reduced (Hyatt, 1984). When further cuts are needed, faculty costs, accounting for as much as 40-44 percent of an institution's total budget, are reduced (Riley, 1994). Wattenbarger (1978) reports institutions normally reduce faculty costs through a collection of the following methods in order of frequency: not filling vacancies, terminating nontenured faculty, terminating part-time faculty, encouraging early retirements, and reassigning faculty. Riley (1994) notes that actual elimination of currently filled positions is a rarely employed strategy, with the use of attrition methods most commonly used to reduce faculty costs.

Innovative Strategies

Chabotar and Honan (1990) make the distinction that there are “tactical” and “strategic” perspectives to what in this study are referred to as “rightsizing strategies.” A tactical perspective takes the college mission “as is” and searches for the most constructive ways to achieve it. Individuals operating from a tactical perspective do so through conservative strategies, concentrating on increasing organizational efficiencies. Individuals operating from a strategic perspective, on the other hand, do so through mission-based approaches. This strategic perspective begins by reconsidering the primary purpose of the institution and determining if it is most effective to expand, contract, or reengineer related functions to better serve the community. The concepts of innovative rightsizing strategies are congruent with this strategic perspective.

Macro Level: Reshaping the Institution

Writers in the area of management theory sometimes classify organizations as being either “passive reactors” or “aggressive initiators” in their dealings with decline (Whetten, 1980, p. 353). Organizations employing innovative strategies tend to fall into the aggressive initiator camp. Consistent with this, the Pew Study Group (1993) found that one of the key elements of institutional restructuring is the effort to purposefully reshape the institution. This purposeful reshaping begins with the college mission and prioritizes programs based on contributions to that end.

Financial constraints provide limits to the number of programs and services institutions can offer. Accordingly, in order to invest in certain programs, reductions or eliminations need to come in others deemed lower in priority. This process has been commonly referred to as "growth by substitution." Because efforts to programmatically reshape the institution are controversial with faculty, a common strategy among institutions is for faculty and administrators to craft an academic plan together.

Rowan College recently employed a strategic plan to "grow by substitution" (Pew Study Group, 1993, p. 10B). Like many colleges, Rowan had been pinched by contracting state funding. To make up for the shortfall, again like many colleges, Rowan increased student tuition and fees. Realizing the declining environment was longer-term in nature, President James appointed a planning committee comprised of faculty, administrators, and students to reshape the institution, identifying programs which might be eliminated or reduced. Ultimately, the committee recommended that the college phase-out 23 programs, certificates, and specializations, saving the college some \$2.7 to \$3.5 million during the 1993 to 1997 fiscal years. Any surplus funds generated by these savings would go to developing and supporting higher priority programs. There seems little doubt that faculty, staff, and student participation in the planning process is essential in any successful reshaping strategy.

Macro Level: Developing Incentives for Quality and Productivity

Consumer behaviorists have consistently shown that consumer perceptions of product quality vary directly with price. Thus, the higher the price, the better the *perceived* quality. This is particularly true when no other clues about product or service quality are available (Monroe, 1973). In a similar fashion, this behavior has been carried over to higher education. It is customary in higher education to equate quality with money; the more an institution spends, the higher the perceived quality of its services. A more telling measure of quality is how well an institution performs its mission, as gauged by student satisfaction. Quality in this context results in establishment of an incentive system achieving new definitions of high performance and quality (Pew Study Group, 1993, p. 12B).

Responsibility Center Budgeting (Whalen, 1991) is one example of a macro level innovative strategy redefining aspects of "quality." Responsibility Center Budgeting is a financial management system that decentralizes both resource acquisition and budgeting to carefully defined academic and support units. These units might be thought of as autonomous mission teams, loosely coupled to a central administrative mission team. Some have equated this decoupled system to business subsidiaries, each with considerable power to adjust price, modify product and service, and alter operating unit structure--as long as unit decisions can be defended as promoting the organizational mission (Whetten, 1980). Moving the budgeting system closer to programmatic

levels, Responsibility Center Budgeting can provide incentives for more careful resource management. It moves teams to monitor programs for contributions to mission and to play an active role in meeting locally (i.e., academic unit) identified short- and long- term needs.

Micro Level: Reengineering Work Processes

In addition to macro level, across the institution strategies, there are micro level strategies used to rightsize institutions in declining environments. These strategies are more specific to the division, department, or unit level. The reengineering of work processes is an example of a micro level innovative strategy. The term "reengineering" has been borrowed from contemporary business management literature. In essence, reengineering is a rightsizing method focusing on *process*. Hammer and Champy (1993), two authors helping bring popularity to the reengineering movement, claim one of the greatest problems in today's organizations is that people ignore process. This has lead to unwieldy and unnecessary processes and process layers resulting in redundant costs and increased inefficiencies. Hammer and Champy argue that it is the work of the "specialist" which is much to blame for this problem.

As related to higher education, the concepts of reengineering are only now entering the lexicon of leadership. To date, much of the reengineering work in colleges has been done in the administrative service areas of colleges. It is not that instructional and student service areas could not benefit from

reengineering; no doubt they could. But the functional processes found in administrative services makes the area rich in potential benefits from reengineering.

One form of reengineering colleges are showing a greater willingness to use is "outsourcing." Outsourcing is an arrangement to purchase from outside suppliers goods and services which were formally provided internally.

Although food services and bookstore operations have long been outsourced, colleges are outsourcing many less traditional areas such as security services, fleet operations, payroll functions, and printing services. Purdue University has even found savings in purchasing its steam from the city rather than producing its own (Pew Study Group, 1993, p. 14B). Certainly there is much potential for outsourcing and other forms of reengineering in rightsizing.

Micro Level: Building a "Quality" Culture

A final example of innovative rightsizing strategies relates to the concepts and principles behind the "quality" movement. Implementing "quality" in an organization is paradoxically *led* from the top, "bottom up." That is, in general, it works by empowering everyone, especially those at lower levels. Accordingly, it is being classified here as a micro level strategy, but clearly it could be (and should be) viewed as a macro strategy as well. In essence the "quality" movement is characterized by the following key concepts:

- ❖ A commitment to *ongoing quality*. Continuous improvement is an important concept, as the operating environment is constantly changing. Review and improvement must be constant.
- ❖ A focus on the *customer*. The “customer” here is defined as anyone requesting information or services from a member of the campus community. Students are certainly customers, but under this definition so too are other administrative staff, faculty, the public, board members, etc.
- ❖ An emphasis on *teamwork*. Teamwork in this context encompasses teams crossing departmental boundaries when appropriate. Certainly building trust is an important aspect here.
- ❖ A strong emphasis on *staff development*. This may be one of the most necessary components, contributing to the development and success of all others quality elements. Peter Senge (1994) sets out five “disciplines” of learning organizations: (a) Personal Mastery, learning to expand our individual capacity; (b) Mental Models, a form of critical thinking; (c) Shared Visioning, building a sense of group commitment; (d) Team Learning, transforming group ideas into a whole greater than the sum of the individual contributions; and (e) Systems Thinking, a way of thinking about the forces and interrelationships shaping the behavior of the organization. Each of these core disciplines needs pedagogy and time for learning and practice.

Many institutions of higher education share an interest in the quality movement and have integrated the principles into their operations. One of the first documented community college cases of "quality" success was with Fox Valley Technical College, one of 16 districts making up the Vocational, Technical, and Adult Education system in Wisconsin. In 1985, President Stanley Spanbauer began exploring "quality" training for local businesses. Through this inquiry, Spanbauer saw the potential benefits of quality and decided to implement a multi-phase quality program at his own organization. This was done even though Fox Valley was a healthy institution. After almost a decade of quality experience, Dr. Spanbauer and Fox Valley Technical College were honored at the 1993 American Association of Community Colleges' national convention in Portland, Oregon. The President reported that the quality culture developed at his college has improved conflict resolution, customer service, productivity measurement, graduate placement, cost containment, and organizational climate. One of the most impressive indicators of Fox Valley's commitment to Continuous Quality Improvement (CQI) is in its pledge to staff education. The college's professional development budget now exceeds two percent of its total annual budget (Tyler, 1993). This is unheralded by national standards and a clear gauge of the importance the college places on the investment in a "quality" culture.

Taxonomy of Rightsizing Strategies
Discovered in the Literature

Overall, there were well over 150 specific rightsizing strategies discovered in this literature review. The rightsizing strategies found formed a potential item pool for the survey instrumentation developed and administered in the study. This grounding of the survey instrumentation in the literature strengthened data validity. This aspect of the study will be discussed further in subsequent chapters. Figure 5 uses the elements of the rightsizing taxonomy presented in Figure 4 to organize strategies discovered in this literature review.

Figure 5
Summary of Rightsizing Strategies
Discovered in Review of the Literature

SUMMARY OF CONVENTIONAL STRATEGIES:

Enhancing Revenues:

Sample Strategy Concepts: Raise tuition and fees; increase fund raising efforts; and increase recruitment efforts.

Strategy Sources: Campbell (1982a); Chabotar & Honan (1990); Collins et al. (1994); Ginsburg (1982); Luskin & Warren (1985); Mortimer (1985); Pew Study Group (1993); Riley (1994); Wattenbarger & Vader (1986).

Reducing Costs:

Sample Strategy Concepts: Reduce travel, supplies, library book budgets; leave positions vacant; across the board cuts; course and program cuts, defer maintenance; and freeze salaries.

Strategy Sources: Angel & DeVault (1991); Blong & Bennett (1991); Collins et al. (1994); DeCosmo (1978); Green (1992); Hyatt (1984); Leitzel et al. (1993); McGuire (1978); Mortimer (1985); Nicklin (1992); Pew Study Group (1993); Riley (1994); Wattenbarger and Vader (1986).

Figure 5, Continues

Figure 5, Continued

SUMMARY OF INNOVATIVE STRATEGIES:

MACRO LEVEL:

Reshaping the Institution:

Sample Strategy Concepts: Prioritize programs; growth by substitution; and external partnerships.

Strategy Sources: DeCosmo (1978); Hauptman (1991); Mortimer (1985); Pew Study Group (1993); Riley (1994); Stevenson & Walleri (1981); Whetten (1980).

Developing Incentives for Quality and Productivity:

Sample Strategy Concepts: Responsibility Center Budgeting; analysis of service quality; and customer service.

Sources: Hyatt (1984); Monroe (1973); Pew Study Group (1993); Riley (1994); Whalen (1991); Whetten (1980).

MICRO LEVEL:

Reengineering Work:

Sample Concepts: Prioritize tasks and outcomes; decentralize power; use of technology; and generalize work responsibilities.

Sources: Benson (1993); Hammer & Champy (1993); Hammer & Stanton (1995); Nicklin (1992); Pew Study Group (1993); Riley (1994).

Developing Quality:

Sample Concepts: Implement "quality" concepts as management tools; and encourage institutional focus on customer.

Sources: Benson (1993); Pew Study Group (1993); Riley (1994); Wattenbarger & Vader (1986).

Theoretical Framework

Tylerian Objective-Oriented Evaluation Method

The theoretical framework for this study was based on a Tylerian objective-oriented evaluation approach. This objective model of evaluation derives from the work of Ralph Tyler, dating back to the late 1920s. In his

work, Tyler stressed the use of an objectives model to design and evaluate school curriculum. According to Tyler,

Most of the schools began their curriculum development with one or two ideas about what needed to be done, but they soon discovered that the problems were more complex than they had earlier conceived. Those who had become very conscious of the large gap between the needs and interests of the students and the content of the curriculum soon found that there was also a serious problem of relating the curriculum to the opportunities and demands of the changing situations that the students were encountering in life outside the school (Norris, 1990, p. 17).

In 1934 Tyler was invited to direct the evaluation staff of the Eight-Year Study (1932-40), a study sponsored by the Progressive Education Association. Reporting on students, Tyler commented that the term "evaluation" should be used rather than terms such as "measurement," "test," or "examination" because evaluation implied "a process by which the values of an enterprise are ascertained" (p. 16). For Tyler, one important aspect of the evaluation process was to make periodic checks on the effectiveness of schools and curriculum and indicate points where alignments might be necessary. It was this institutional effectiveness evaluation that was of particular interest to this study and around which the research design was framed.

CHAPTER 3 RESEARCH METHODOLOGY

Introduction

The purpose of this study was to evaluate the consistency between the rightsizing behavior of Oregon's community college leaders and the mission of open educational access. "Rightsizing" describes the dynamic of adjusting proportions of personnel, equipment, facilities, products, and services relative to revenues so as to maximize both organizational efficiency and effectiveness. The purpose of this study was delimited to describing rightsizing leadership behavior related to the mission of educational access to Oregon's community colleges. The fact that rightsizing behaviors were conducted or contemplated in times of increased financial austerity was a significant aspect to this study. The assumption was that selection of rightsizing strategies does not occur casually or in isolation, but instead emerges after serious personal reflection upon institutional values, visions, goals, and mission. Evaluating leadership behavior under these conditions provided important insight as to how Oregon's community college leaders value and support professed mission elements. The study in no way attempted to determine the net impact or effect of strategies on access to Oregon's community colleges. The specific research questions addressed were:

- (a) What rightsizing strategies have Oregon's community college leaders employed to cope with the changing environment?

- (b) What rightsizing strategies do Oregon's community college leaders plan to employ to cope with the changing environment?
- (c) How do Oregon's community college leaders rate rightsizing options in terms of the strategies' impact on educational access?
- (d) Is there consistency between the behaviors of Oregon's community college leaders as indicated by past and planned use of rightsizing strategies and the leaders' strategy ratings relative to the impact on educational access?

Research Design

The framework for the study was based on a Tylerian objective-oriented evaluation approach (Worthen & Sanders, 1987). Specifically, this approach calls for (a) the identification of broad organizational goals; (b) a definition of the goals in behavioral terms; (c) the development of a behavioral evaluation instrument; and (d) a comparison of the behaviorally defined goals with the demonstrated behavioral data collected by the instrument. The objective-oriented evaluation design was well suited to this particular study as it permitted a comparison of an established goal (in this case, the community college mission of open access) with behaviors both demonstrated and contemplated (in this case, as represented by various rightsizing actions). Ultimately, this comparison revealed whether priorities of community college leaders were consistent with the mission of open access.

Based on the Tylerian theoretical framework, the study's research design was ex post facto, using survey methodology. Judd, Smith, & Kidder (1991) contend that survey research is not concerned with causality, rather its focus is on "how many people believe something or act in a certain way or have a certain characteristic" (p. 101). Consistent with this proposition, the research design of this study was descriptive, utilizing survey instrumentation to solicit data to address the research questions. Each of the elements of the Tylerian type evaluation approach as related to this study is presented in the following sections.

"Goal"

For purposes of this study, the "educational access mission" of community colleges, as defined and detailed in Chapter 1, served as the "goal" to be evaluated against. Expressed differently by various Oregon community colleges, open educational access is espoused as a fundamental element in the state's 16 community college missions. This mission of open educational access is further established in the enabling community college legislation and codified in Oregon Law. Oregon Revised Statutes (ORS), Chapter 341.009, Section 6, reads that, "Admission to the college should be open to high school graduates or nonhigh schools graduates who can profit from the instruction offered." Section 17 reads that, "The cost of education to the individual should be sufficiently low to permit students of low-income families to attend. This is

particularly true of tuition costs." The concept of "open access," as captured in these statutes and the mission statements of the state's community colleges and as chronicled in Chapter 1, was the "goal" upon which this study focused.

Expected Behaviors

Leslie (1987) argues that,

"The ultimate 'management instrument' of those who govern, manage, and lead is money. The way leaders and managers allocate and manage their resources often determines the effectiveness of their goal accomplishment. The experienced higher education observer knows that the true test of leadership's and management's intent is the pattern of their dollar allocation" (p. 194).

In a period of environmental decline, a community college operational leader in active support of the mission of open access would be reasonably expected to implement those strategies which he or she ranks highly in achieving this mission. This is consistent expected leadership behavior. Conversely, implementing strategies which he or she ranks lowly in achieving the mission of open access would be inconsistent expected leadership behavior. These are reasonable assumptions and formed the basis of the expected behaviors in this study.

Behavioral Evaluation

There were two distinct, but related phases to the behavioral evaluation involved in this study. Phase I consisted of collecting coping strategies (i.e., rightsizing strategies) used and planned for use by Oregon's community college leaders. Phase II consisted of having each of the coping strategies from Phase I rated by a panel of the leaders relative to the strategy's perceived impact on educational access.

Study Population

In Phase I, the survey population consisted of all college leaders responsible for instructional services, college services, and student services for each of Oregon's 16 community colleges. Depending on the college organizational structure, these leaders held various titles, including "Associate Dean," "Dean," and "Vice President." A major assumption of the study was that these "operational leaders," rather than board members, presidents, or other college leaders, were closest to the data needed and, accordingly, best able to address survey issues. The reasoning here was that deans of instruction, student services, and administrative services are typically the real decision makers for colleges regarding general budget allocations for their divisions. All totaled, 48 completed surveys were the maximum potential to be collected, three from each of the state's 16 community colleges. Because of this small survey population, a high response rate was particularly important to the study.

Analyses and conclusions concerning past and planned rightsizing behaviors were based on data collected from this Phase I survey.

Phase II of the study consisted of gathering perceptual data from the community college leaders. Specifically, Phase II determined the leaders' perceptions of the impact on access of the rightsizing strategies surveyed in Phase I. The Phase II population consisted of a sample panel of six community college leaders purposefully selected from the pool of Phase I leaders. The Phase II panel was chosen with consideration given to (a) college size representation; (b) leadership area representation (i.e., two were chosen from instructional services, college service, and student services); and (c) participant's willingness to expend further time and effort in the study.

Summary institutional statistics for the study population are presented in Tables 1 and 2. The FTE Categories within these tables were developed by the researcher, considering operational issues and natural student FTE size clusterings of the colleges. Specific identification of colleges within each FTE Category can be found in Appendix A: Oregon Community Colleges by Student FTE Categories. In addition to FTE Categories, the tables identify seven "floored" colleges. "Floored" colleges are those having relatively high per student FTE costs as established by an OCCS "flooring formula." On June 30, 1995, the Oregon State Board of Education adopted an "equity" allocation formula holding state appropriations level for these seven institutions until such time as their total institutional costs can be spread among a greater number of student FTE and/or can be reduced relative to current FTE. Reportedly, this is

placing these institutions in a situation of increasing financial austerity as they jockey to adjust to a changing environment (Rubenstein, 1995).

Table 1
Oregon Community College Institutional Summary Data
by FTE Categories

	FTE Categories				Total N=16
	I <1500 n=4	II 1500-2499 n=4	III 2500-5499 n=4	IV 5500≥ n=4	
Total Resources	\$12,305,721	\$39,334,174	\$62,491,705	\$174,943,488	\$289,075,088
^a Total Student FTE	1,979.29	6,976.32	14,018.44	38,771.26	61,745.31
^b Full-time Admin. Positions	24	84	110	295	513
Full-time Faculty FTE	35	295	434	1,002	1,766
Part-time Faculty FTE	3	518	1,312	2,219	4,052
^c "Floored" Colleges	1	4	1	1	7

Note. Data calculated from various tables from Oregon Community College 1993-94 Profile, Oregon Office of Community College Services. ^aOne FTE equals 510 clock hours of class time. ^bNot all administrators and faculty were reported for Category I colleges. ^c"Floored" colleges are those having relatively high per student FTE costs, as established by an OCCS "flooring formula." The state allocation formula holds state appropriations level for these institutions until such time as their total institutional costs can be spread among a greater number of student FTE and/or can be reduced relative to current FTE.

Table 2
Oregon Community College Institutional Summary Data
by FTE Categories by Percentage

	FTE Categories				Total N=16
	I <1500 n=4	II 1500-2499 n=4	III 2500-5499 n=4	IV 5500≥ n=4	
Total Resources	4.3%	13.6%	21.6%	60.5%	100%
^a Total Student FTE	3.2%	11.3%	22.7%	62.8%	100%
^b Full-time Admin. Positions	4.7%	16.4%	21.4%	57.5%	100%
Full-time Faculty FTE	1.9%	16.7%	24.7%	56.7%	100%
Part-time Faculty FTE	0.1%	12.8%	32.4%	54.7%	100%
^c "Floored" Colleges	14.3%	57.1%	14.3%	14.3%	100%

Note. Data calculated from various tables from Oregon Community College 1993-94 Profile, Oregon Office of Community College Services. ^aOne FTE equals 510 clock hours of class time. ^bNot all administrators and faculty were reported for Category I colleges. ^c"Floored" colleges are those having relatively high per student FTE costs, as established by an OCCS "flooring formula." The state allocation formula holds state appropriations level for these institutions until such time as their total institutional costs can be spread among a greater number of student FTE and/or can be reduced relative to current FTE.

Study Instrumentation Design and Development

The design and structure of the Phase I survey instrument was materially influenced by similar, prior research conducted by Collins et al. (1994), Leitzel et al. (1993), and Riley (1994). From these sources, as well as

others set out in Figure 6, a survey instrument was developed, "Coping with a Changing Environment" (see Appendix B: Study Instrumentation).

Figure 6
Summary of Rightsizing Strategies Used in Survey Instrumentation

SUMMARY OF CONVENTIONAL STRATEGIES

Enhancing Revenues:

Survey Items: 8, 12, 16, 32, 53, 54, 61, & 74.

Strategy Sources: Campbell (1982a); Chabotor & Honan (1990); Collins et al. (1994); Ginsburg (1982); Luskin & Warren (1985); Mortimer (1985); Pew Study Group (1993); Riley (1994); Wattenbarger & Vader (1986).

Reducing Costs:

Strategy Items: 1-4, 7, 9, 18-19, 21, 25, 27, 30, 33, 36, 38-39, 42-43, 46, 52, 56-59, 62-63, 70, 73, 78, & 80.

Strategy Sources: Angel & DeVault (1991); Blong & Bennett (1991); Collins et al. (1994); DeCosmo (1978); Green (1992); Hyatt (1984); Leitzel et al. (1993); McGuire (1978); Mortimer (1986); Nicklin (1992); Pew Study Group (1993); Riley (1994); Wattenbarger and Vader (1986).

SUMMARY OF INNOVATIVE STRATEGIES

Reshaping the Institution:

Survey Items: 10, 13, 17, 24, 28, 41, 44, 51, 64, 71, & 77.

Strategy Sources: DeCosmo (1978); Hauptman (1991); Mortimer (1985); Pew Study Group (1993); Riley (1994); Stevenson & Walleri (1981); Whetten (1980).

Developing Incentives for Quality and Productivity:

Strategy Items: 11, 14-15, 31, 55, 60, 67, & 75.

Strategy Sources: Hyatt (1984); Monroe (1973); Pew Study Group (1993); Riley (1994); Whalen (1991); Whetten (1980).

Reengineering Work Processes:

Survey Items: 6, 22, & 49.

Strategy Sources: Benson (1993); Hammer & Champy (1993); Hammer & Stanton (1995); Nicklin (1992); Pew Study Group (1993); Riley (1994).

Figure 6, Continues

Figure 6, Continued

Building "Quality" Culture:

Survey Items: 5, 20, 23, 26, 29, 34-35, 37, 40, 45, 47-48, 50, 65-66, 68-69, 72, 76, & 79.

Strategy Sources: Benson (1993); Pew Study Group (1993); Riley (1994).

This survey instrument was divided into two parts. Part I listed eighty short conceptual phrases, describing various rightsizing (i.e., "coping") strategies. Each of these phrases was derived from the literature of rightsizing management or incorporated from prior research. The survey items and related conceptual sources are summarized in Figure 6, using the rightsizing taxonomy presented in Chapter 2. The instructions for the instrument asked participants for two dichotomous responses for each of the eighty strategies listed. The dichotomous options were first, whether they "Have Used" or "Have Not Used" the strategy and second, whether they "Plan to Use" or have "No Plan to Use" the particular strategy. The closed-ended questions in Part I were designed to elicit quantitative data providing a comprehensive profile of leadership rightsizing behavior. Accumulated and stratified leader responses to the survey indicated their prior frequency and future propensity for particular strategy uses.

In Part II of the Phase I survey, at the end of the instrument, respondents were asked for an open-ended response to other coping strategies they have used, but not covered in Part I. A content analysis was conducted on the open-ended responses in this section. The strategies pulled

from Part II were then evaluated for integration into the survey data collected from responses in Part I. The procedures for the content analysis followed the "Open Coding" methodology described by Strauss and Corbin (1990, pp. 61-74). This method is also known as the "constant comparative method" (Glaser, B. & Strauss, A., 1967, pp. 101-116), allowing for discovery of broad categorical themes.

Phase I Survey Administration

In terms of survey administration, the researcher requested and received a research endorsement from the Western Center for Community College Professional Development. The Western Center, based at Oregon State University, serves the 15 state region of the Western Interstate Commission on Higher Education. Because of the Western Center's visibility and recognition, this endorsement lent additional credibility to the study, potentially increasing survey response rates. Although the researcher assumes sole responsibility for all aspects of the study, the Western Center and Executive Director, Dr. Ronald Daugherty, generously agreed to assist in survey administration, providing facility, supplies, and staff support services.

The survey was distributed by mail to the survey population on August 1, 1995. A cover letter (see Appendix C: Study Correspondence) accompanying the survey described the purpose of the study, the endorsement of the Western Center, assurance of respondent and institutional anonymity, and an invitation

to request, if interested, completed study results. Individual instruments were coded, so the researcher was able to determine and contact non-responders and categorize completed surveys. Follow-up surveys were mailed to non-responders on August 22, 1995, three weeks from the initial mailing. The follow-up cover letter for non-responders is also contained in Appendix C: Study Correspondence. Respondents not returning the survey by August 29, 1995, were contacted by telephone and prompted to complete and return the survey as soon as possible.

When all surveys from Phase I were recovered, Phase II of the study was initiated. In Phase II a sample of six panelists chosen from the leadership pool was established. The individual leaders on this panel were contacted and asked to rate each of the eighty coping strategies presented in Phase I relative to its impact on educational access. A five point scale was used (see Appendix B: Study Instrumentation), ranging from "substantially negatively impacts access" to "substantially positively impacts access." The content of the strategy phrases from Phase I was not altered in any way, with only the new rating scale replacing the "have used/have not used" and "plan to use/no plan to use" response options. Data collected from the Phase II access rating instrument, along with data collected from the Phase I survey, formed the database for the study.

Data Validity

It is particularly important with ex post facto study designs that data validity be given significant consideration. This descriptive study was primarily concerned with external validity. In this case the task was to describe behavioral aspects related to educational access of the study population. While the results of this study are generalizable across the 16 Oregon community colleges, one should use substantial caution generalizing to other community college systems or institutions.

The study was designed to preclude researcher influences on data collection, reducing the possibility of data contamination, manipulation, and bias as much as feasible. As previously mentioned, Part I of the survey instrument consisted of eighty short conceptual phrases. As each of these phrases was derived from related decline management research, the Phase I survey instrument (and its cognate Phase II access rating instrument) was firmly grounded in the literature. This grounding added considerable validity to the data collected.

Although each of the eighty strategies was associated with a particular taxonomy (see Figure 6), they were presented in the survey instrument in random order to discourage "response sets" by survey participants. To augment content validity, the instrument underwent a pilot test using a sample peer population of Washington state community college leaders. These leaders were equivalent in institutional rank to those of the study population.

The results of this pilot test were used to mitigate face validity issues before the instrument was employed in the study. Finally, to strengthen content validity further, Part II of the survey instrument asked respondents to list additional coping strategies not contained in Part I. Responses to this open-ended question were used as a check on the coverage of the strategy selection provided in Part I. Given the groundings of Part I strategies in the literature and the open-ended question and content analysis of Part II, the survey instrument provided an adequate representation of a sampling of the universe of rightsizing coping strategies.

The ratings in Phase II of each of the strategy items as to its impact on access also had important validity considerations. Rather than adding a second phase to the study, the researcher considered several other options to assess the impact on access of the rightsizing strategies surveyed in Phase I. These options included using information gathered from the literature, using "expert" opinion, and having a similar but independent population rate the items. It was ultimately decided that the most justified rating would come from the members of the survey population, itself. This procedure had both pros and cons.

The primary argument against using the Phase I survey population related to the possibility of carry over bias effect. If, for instance, a respondent from Phase I felt uneasy about using or planning to use a particular strategy, he or she may consciously or subconsciously bias the rating on access of this same item in Phase II. The potential of such bias would be minimal as

respondents would have to recall how they marked particular strategies from the 160 responses (80 for Have Used/Have Not Used and 80 for Plan to Use/No Plan to Use) in Phase I. However, the potential for such bias existed.

The primary argument for using the Phase I population related to the issue of consistency. Because the study was attempting to determine the consistency between the behavior of a unique population of community college leaders and the institutional goal of open access, it was important to have the same leaders describe both their behaviors and their perceived importance of the behavior relative to their goal. The importance of capturing this dimension in the study lead the researcher to favor having the Phase I survey population, itself, rank survey items relative to the perceived impact on access. Using another method to rank strategies relative to access mitigates carry over bias, but it also introduces other, potentially more damning content validity issues and sacrifices the important behavioral linkage.

One extra precaution was taken to reduce the potential for carry over bias. The ranking instrument in Phase II was not administered to the study population until one month had elapsed since exposure to the survey instrument in Phase I. This increased the difficulty of respondents remembering their Phase I responses.

Data Analysis and Presentation

The data analyses in this study were extensive. Emory (1985) contends that descriptive analyses are the study of distributions of variables. He further states that through descriptive studies profiles can be established of a "multitude of characteristics such as size, composition, efficiency, or preference" (p. 336). In many ways this study involved determining, describing, and presenting a profile of "preferences" of Oregon's community college leaders relative to rightsizing strategies. Tabulations were particularly useful in achieving this aim. The study made extensive use of tabulations and cross tabulations of variables, analyzing and presenting information in four dimensions: (a) population responses grouped by strategy taxonomy; (b) population responses grouped by college FTE Category; (c) population responses grouped by leadership area; and (d) population responses grouped by college "Equity" and "Floored" status. These tabulations contained survey variables displayed in frequency and percentage rank-order. Frequency distributions (i.e., "Box and Whisker" dispersion maps) and various bar and area charts were also used.

Study Limitations

This study was limited in four primary ways. First, although the survey was mailed to community college leaders responsible for educational, administrative, and student services of Oregon's sixteen community colleges,

there was no guarantee they were the individuals responding to the survey. Some of these officers may have passed the survey instrument along to subordinates, delegating him or her to complete it. Accordingly, the results would be indicative of past and planned behavior of an individual who may not have been qualified to address the specific survey information requested. Secondly, an intimate knowledge of college operations was necessary to respond adequately to the survey. Because of inexperience, a lack of training, or a short-term with the particular institution, not all respondents may have had the requisite knowledge to properly respond to the survey. Individuals in this situation completing the survey may have skewed the data. No allowance was made for this. Thirdly, because of diverse organizational structures found in Oregon's community colleges, not all leaders included in the survey were qualified to address issues related to budget issues. Specifically, two nonresponders were deans of students not directly responsible for budget development. Operational leaders (i.e., vice presidents for instruction) who were responsible for student service budgets had dual responsibilities for both instruction and student services. The decision was made to replicate data received from the two leaders with dual budgetary responsibility. This maintained proportionate representation of both the colleges and the leadership areas examined in the study. However, it also lost differentiation of an already small population. Finally, the study was limited in its ability to draw any definitive conclusions as to the impact or net effect of rightsizing actions on

community college access. For example, a rightsizing strategy used having an adverse impact on access did not necessarily preclude possibilities that other measures promoting access were not concurrently being initiated. This study was strictly delimited to describing leadership rightsizing behavior related to access and not analyzing any net affect on access.

CHAPTER 4 PRESENTATION AND ANALYSIS OF DATA

Introduction

The purpose of this study was to evaluate the consistency between the rightsizing behavior of Oregon's community college leaders and the mission of open educational access. This chapter presents information collected and analyzed from the study. The chapter is organized around the four research questions addressed in the study. For each question, related findings are briefly summarized. Following this summary, a detailed presentation and analysis of supporting data is provided.

The data analysis in this study was extensive, particularly related to research questions one and two. The primary goal of the analysis for these questions was to develop a rightsizing behavioral profile from which patterns and trends could be identified. This profile was accomplished by examining the data in multiple dimensions. Specifically, data were analyzed by rightsizing strategy classification, by institutional FTE Category, by leadership area of responsibility, and by "Equity" and "Floored" college status. Detailed descriptions and definitions of each of these groupings are found in Chapters 2 and 3. This multidimensional analysis established a comprehensive leadership behavioral profile and a means of triangulation between and among groups to support conclusions relating to open educational access.

In general, the data were collected in two phases, both receiving 100% response rates. The response rate for Phase I needs some explanation.

Phase I of the study surveyed coping strategies used and planned for use to cope with the changing environment. Of the 48 surveys projected for return, only 46 surveys were actually collected. Subsequent follow-up revealed that the two nonresponders were deans of students not directly responsible for budget development. Accordingly, they were not qualified to complete the survey instrument. Operational leaders (i.e., vice presidents for instruction) responsible for student service budgets had dual responsibilities for both instruction and student services areas. Because of this the decision was made to replicate data received from the two leaders with dual budgetary responsibility. This maintained proportionate representation of both the colleges and the leadership areas examined in the study.

Phase II of the study collected perceptual data on the impact of strategies surveyed in Phase I relative to student access. A purposeful sample of six leaders from Phase I was chosen to participate in Phase II. All six leaders chosen to participate did so, completing and returning the access ratings for each strategy. The data collected in Phases I and II of the study were used to address the overall study purpose and research questions.

Research Question 1

What rightsizing strategies have Oregon's community college leaders employed to cope with the changing environment?

Summary of Significant Findings for Question 1

- (a) The strategy to *increase tuition* received consistently high past use (see Tables 3, 4, 14, 18, and 21).
- (b) The strategies to *reduce positions through attrition and reallocate positions when they become available* received high past use (see Tables 5, 6, 14, 18 and 21).
- (c) By strategy taxonomy, "*quality*" *culture development* strategies had the greatest overall use with *revenue enhancing* strategies and *process reengineering strategies* second and third most popular, respectively (see Figure 7).
- (d) All Institutional FTE Categories made extensive use of the strategy to *communicate with staff regarding budget constraints* (see Table 14).
- (e) Smaller FTE Categories I and II had less strategy use than did larger FTE Categories III and IV (see Table 14 and Figure 9).

Detailed Data Presentation and Analysis

Tables 3 through 21 summarize leader responses to the Phase I survey, relating to past strategy use. Information presented in these tables examines four dimensions: (a) population responses grouped by strategy taxonomy; (b) population responses grouped by college FTE Category; (c) population responses grouped by leadership area; and (d) population responses grouped by college “Equity” and “Floored” status. Analyzing the data in these dimensions provided a comprehensive profile of past rightsizing behavior and necessary triangulation to support study conclusions.

Leadership's Top 25 Strategies Used Grouped by Taxonomy

There were 80 strategies listed in the Phase I survey. As described in Chapter 3, these strategies were grounded in the decline management literature and represented conceptual phrases describing particular rightsizing actions. Respondents were asked to indicate for each strategy if they had used the strategy. The information presented in the following tables was extracted from strategies coded “yes” by respondents as “Have Used.” Overall, 3,840 affirmative indications of strategy use were possible (48 leaders times 80 strategies). Of these, 2,480 actual indications of past strategy use were made. This represented a 65% level of use of strategies surveyed.

Population use of specific strategies ranged from a minimum of 4 leaders (8%) using the strategy to “Reduce off-campus credit programs” to a maximum of 48 leaders (100%) using the strategy to “Communicate with staff regarding budget constraints.” Table 3 provides a percentage rank-ordering of the top 25 strategies employed by Oregon community colleges.

Table 3
Top 25 Rightsizing Strategies Used

Rank	Strategy	N=48	%
1	Communicate with staff regarding budget constraints.	48	100%
2	Communicate with faculty regarding budget constraints.	47	98%
3	Increase tuition.	47	98%
4	Emphasize teamwork across departments.	45	94%
5	Involve staff in strategy suggestions for budgetary constraints.	45	94%
6	Build formal partnerships with business and industry.	44	92%
7	Build formal partnerships with high schools.	44	92%
8	Encourage institutional focus on the customer.	44	92%
9	Reallocate positions when they become available.	44	92%
10	Increase institutional enrollment.	43	90%
11	Reduce positions through attrition.	43	90%
12	Cultivate alternative funding sources.	42	88%
13	Offer new courses based on high demand.	42	88%
14	Perform cost analysis before strategy implementation.	42	88%
15	Reduce administrative costs.	42	88%
16	Encourage development of new credit programs.	41	85%
17	Involve faculty in strategy suggestions for budgetary constraints.	41	85%
18	Assess quality of academic programs.	40	83%
19	Communicate with general public regarding budget constraints.	40	83%
20	Defer equipment purchases.	40	83%
21	Increase reliance on technology in administrative functions.	40	83%
22	Reengineer work processes.	40	83%
23	Increase fund-raising and development efforts.	39	81%
24	Increase student fees.	38	79%
25	Assess quality of support programs.	37	77%

Leadership's past level of use of the 80 strategies surveyed was 65%. This was calculated by multiplying the 48 leaders in the population by the 80 strategies surveyed. This resulted in 3,840 total possible strategy uses. Of these, there were 2,480 indicated strategy uses. Indicated uses divided by the total possible uses equals the indicated use level of 65%.

Leadership's Past Strategy Behavior Grouped by Taxonomy

Tables 4 through 9 present strategy use information corresponding to the taxonomy of rightsizing strategies in Figure 4. This taxonomy includes the two broad categories of *Conventional* and *Innovative* strategies and the specific subcategories of *Enhancing Revenue*, *Reducing Costs*, *Reshaping the Institution*, *Developing Quality and Productivity Incentives*, *Reengineering Work Processes*, and *Building a "Quality" Culture*.

Past Use of Conventional Strategies

Tables 4 and 5 present *conventional strategies* used by the population. In general, *conventional strategies* are those relating to enhancing revenues or reducing costs.

Past Revenue Enhancing Strategies

A summary of leader response frequencies and the percentage rank-ordering of *revenue enhancing* strategies used is presented in Table 4. Population responses indicated that all eight *revenue enhancing* strategies have been used to some extent. Strategy use in this category ranged from a low of 19% ("Initiate or increase parking fees") to a high of 98% ("Increase tuition"). The leadership's level of use of the eight *revenue enhancing* strategies surveyed was 75%.

Table 4
Revenue Enhancing Strategies Used

Rank	Strategy	N=48	%
1	Increase tuition.	47	98%
2	Increase institutional enrollment.	43	90%
3	Cultivate alternative funding sources.	42	88%
4	Increase fund-raising and development efforts.	39	81%
5	Increase student fees.	38	79%
6	Communicate with business/industry regarding budget constraints.	37	77%
7	Conduct enrollment management studies.	32	67%
8	Initiate or increase parking fees.	9	19%

The leadership's past level of use (based on the maximum possible) of the 8 revenue enhancing strategies surveyed was 75%.

Past Cost Reducing Strategies

Table 5 summarizes the leader response frequencies and the percentage rank-ordering of *cost reducing* strategies used. Responses indicated that all 30 *cost reducing* strategies have been used to some extent. Strategy use in this category ranged from a low of 8% ("Reduce off-campus credit programs") to a high of 90% ("Reduce positions through attrition"). The leadership's level of use of the 30 *cost reducing* strategies surveyed was 52%. The leadership's level of use of all 38 *conventional strategies* was 57%.

Table 5
Cost Reducing Strategies Used

Rank	Strategy	N=48	%
1	Reduce positions through attrition.	43	90%
2	Reduce administrative costs.	42	88%
3	Defer equipment purchases.	40	83%
4	Reduce number of administrative positions.	37	77%
5	Reduce number of support staff positions.	35	73%
6	Reduce travel budgets.	34	71%
7	Defer facility and equipment maintenance.	34	71%
8	Reduce staffing in student services.	33	69%
9	Increase the use of adjunct faculty.	33	69%
10	Reduce secretarial services.	31	65%
11	Reduce funding for student services.	28	58%
12	Initiate across-the-board cuts.	28	58%
13	Limit enrollment in certain programs.	28	58%
14	Initiate a hiring freeze.	27	56%
15	Increase student/faculty ratios.	27	56%
16	Reduce number of part-time positions.	26	54%
17	Reduce positions through layoffs.	25	52%
18	Reduce custodial services.	24	50%
19	Reduce funds for copying expenditures.	24	50%
20	Eliminate or reduce bulk mailings.	23	48%
21	Reduce summer school expenditures.	21	44%
22	Reduce funds for professional development.	20	42%
23	Reduce funds for telephone expenditures.	18	38%
24	Reduce funding for library.	15	31%
25	Reduce library hours.	14	29%
26	Reduce staffing in library services.	13	27%
27	Encourage sabbatical leaves without pay.	8	17%
28	Reduce weekend programs and classes.	7	15%
29	Limit institutional enrollment.	5	10%
30	Reduce off-campus credit programs.	4	8%
The leadership's past level of use (based on the maximum possible) of the 30 cost reducing strategies surveyed was 52%.			

Past Use of Innovative Strategies

Tables 6 through 9 present *innovative strategies* used by the population. In general, *innovative strategies* are those relating to reshaping the institution, developing quality and productivity incentives, reengineering work processes, and building a “quality” culture.

Past Institutional Reshaping Strategies

A summary of leader response frequencies and the percentage rank-ordering of *institutional reshaping* strategies used is presented in Table 6. Population responses indicated that all 11 *institutional reshaping* strategies have been used to some extent. Strategy use in this category ranged from a low of 19% (“Reduce developmental and adult basic education programs”) to a high of 92% (“Reallocate positions when they become available”). The leadership’s level of use of the 11 *institutional reshaping* strategies surveyed was 63%.

Table 6
Institutional Reshaping Strategies Used

Rank	Strategy	N=48	%
1	Reallocate positions when they become available.	44	92%
2	Offer new courses based on high demand.	42	88%
3	Encourage development of new credit programs.	41	85%
4	Evaluate institutional mission as it relates to effectiveness.	37	77%
5	Conduct mission-based reviews of academic areas.	36	75%
6	Implement early retirement incentive programs.	30	63%
7	Revise institutional role and mission.	28	58%
8	Reduce number of faculty positions.	24	50%
9	Reduce non-traditional programs or courses.	20	42%
10	Reduce the scope of activities of the institution.	19	40%
11	Reduce developmental and adult basic education programs.	9	19%

The leadership's past level of use (based on the maximum possible) of the 11 institutional reshaping strategies surveyed was 63%.

Past Quality and Productivity Incentives

A summary of leader response frequencies and the percentage rank-ordering of *quality and productivity incentive* strategies used is presented in Table 7. Population responses indicated that all eight *quality and productivity incentive* strategies have been used to some extent. Strategy use in this category ranged from a low of 40% ("Evaluate management for budgetary constraints on quality") to a high of 88% ("Perform cost analysis before strategy implementation"). The leadership's level of use of the eight *quality and productivity incentive* strategies surveyed was 72%.

Table 7
Quality and Productivity Incentive Strategies Used

Rank	Strategy	N=48	%
1	Perform cost analysis before strategy implementation.	42	88%
2	Involve faculty in strategy suggestions for budgetary constraints.	41	85%
3	Assess quality of academic programs.	40	83%
4	Build formal partnerships with other community colleges.	35	73%
5	Increase reliance on technology in teaching and learning.	35	73%
6	Increase reliance on technology in student services areas.	34	71%
7	Encourage the use of carry-over funds.	32	67%
8	Evaluate management for budgetary constraints on quality.	19	40%
The leadership's past level of use (based on the maximum possible) of the 8 quality and productivity incentive strategies surveyed was 72%.			

Past Process Reengineering Strategies

A summary of leader response frequencies and the percentage rank-ordering of *process reengineering* strategies used is presented in Table 8. Population responses indicated that all three *process reengineering* strategies have been used to some extent. Strategy use in this category ranged from a low of 56% ("Contract out services previously provided internally") to a high of 83% ("Increase reliance on technology in administrative functions" and "Reengineering work processes"). The leadership's level of use of the three *process reengineering* strategies surveyed was 74%.

Table 8
Process Reengineering Strategies Used

Rank	Strategy	N=48	%
1	Increase reliance on technology in administrative functions.	40	83%
2	Reengineer work processes.	40	83%
3	Contract out services previously provided internally.	27	56%
Leadership's past level of use (based on the maximum possible) of the 3 process reengineering strategies surveyed was 74%.			

Past Strategies to Build a "Quality" Culture

A summary of leader response frequencies and the percentage rank-ordering of strategies used to *build a "quality" culture* is presented in Table 9. Population responses indicated that all 20 strategies to *build a "quality" culture* have been used to some extent. Strategy use in this category ranged from a low of 48% ("Utilize ad hoc committee for management of budgetary constraints") to a high of 100% ("Communicate with staff regarding budget constraints"). The leadership's level of use of the 20 strategies to *build a "quality" culture* surveyed was 76%. The leadership's overall level of use of all 42 *innovative strategies* (i.e., the reshaping, quality and productivity, process reengineering, and "quality" culture strategies) was 72%.

Table 9
 "Quality" Culture Strategies Used

Rank	Strategy	N=48	%
1	Communicate with staff regarding budget constraints.	48	100%
2	Communicate with faculty regarding budget constraints.	47	98%
3	Involve staff in strategy suggestions for budgetary constraints.	45	94%
4	Emphasize teamwork across departments.	45	94%
5	Encourage institutional focus on the customer.	44	92%
6	Build formal partnerships with business and industry.	44	92%
7	Build formal partnerships with high schools.	44	92%
8	Communicate with general public regarding budget constraints.	40	83%
9	Assess quality of support programs.	37	77%
10	Build formal partnerships with four-year colleges.	35	73%
11	Communicate with students regarding budget constraints.	35	73%
12	Provide mechanisms for ongoing customer feedback.	34	71%
13	Conduct mission-based reviews of support areas.	33	69%
14	Implement Total Quality Management concepts.	33	69%
15	Maintain trends and projections for management decision making.	32	67%
16	Utilize institutional planning committee for budgetary constraints.	32	67%
17	Conduct mission-based reviews of administrative areas.	28	58%
18	Involve students in strategy suggestions for budgetary constraints.	26	54%
19	Increase staff development.	26	54%
20	Utilize ad hoc committee for management of budgetary constraints.	23	48%
Leadership's past level of use (based on the maximum possible) of the 20 "quality" culture strategies surveyed was 76%.			

Figure 7 summarizes the population utilization levels of all 80 strategies grouped by the rightsizing taxonomy. The figure shows that *cost reducing* and *institutional reshaping* strategies were used least by the population with employment levels at 52% and 63%, respectively. The reluctance of the population to use *cost reducing* strategies is consistent with the literature on decline management (see, Riley, 1994, for a comprehensive discussion). The figure also shows that the level of use of the remaining four strategy categories hovered in the low to mid 70% range.

Overall, the mix of strategy use by Oregon's community college leaders may be indicative of where in the rightsizing process the state's colleges were operating. However, past strategic behavior needed to be compared with future strategic plans to obtain a complete leadership behavioral profile.

Figure 7
Rightsizing Strategy Utilization Levels by Taxonomy

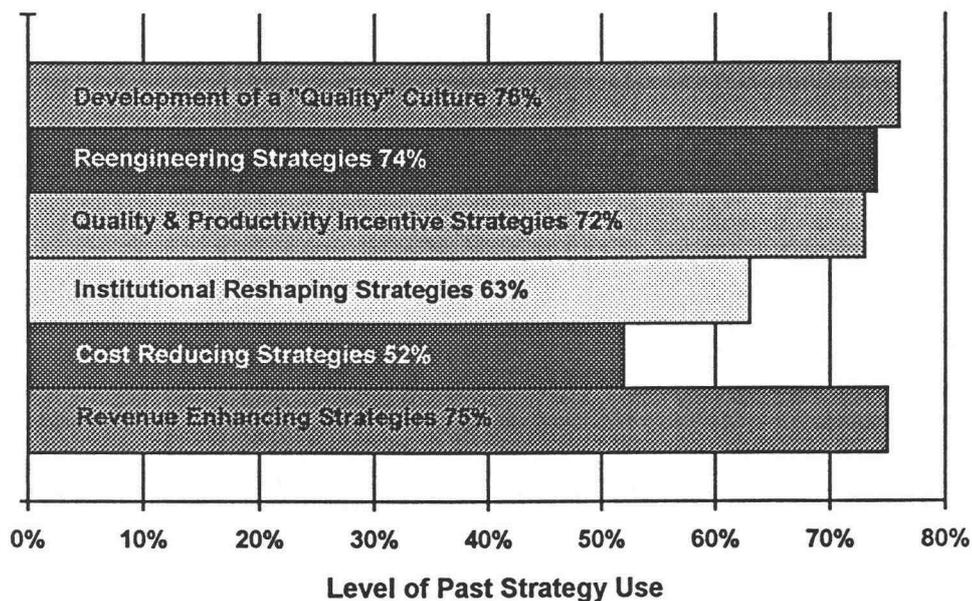
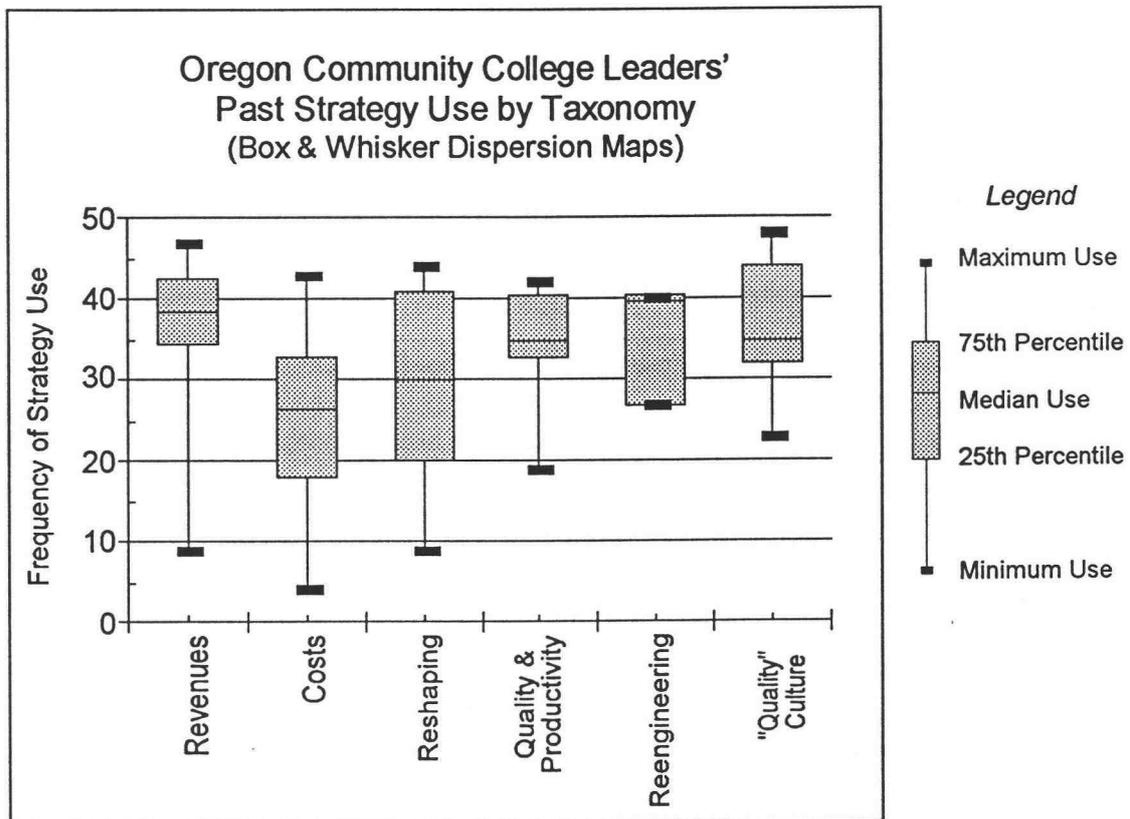


Figure 8 presents summary information on past strategy use grouped by taxonomy. The figure provides dispersion maps of frequency distributions within each taxonomy. Related statistical information used to derive the maps is also provided in the figure.

Figure 8
 Frequency Dispersion Maps and Statistics
 for Past Use of Rightsizing Strategies by Taxonomy



Summary Statistics N=48	Rightsizing Taxonomy					
	Rev.	Cost	Reshap- ing	Quality & Prod.	Reeng.	Quality Culture
Number of Strategies in Taxonomy	8	30	11	8	3	20
Mean Strategy Use within Taxonomy	36	25	30	35	36	37
Standard Deviation	11.7	10.8	11.2	7.3	7.5	7.7
Maximum Strategy Use	47	43	44	42	40	48
75th Percentile of Strategy Use	42.5	33	41	40.5	40	44
Median Strategy Use	38.5	26.5	30	35	40	35
25th Percentile of Strategy Use	34.5	18	20	33	27	32
Minimum Strategy Use	9	4	9	19	27	23

In general the “box and whisker” dispersion maps provide a frequency profile of the population’s uses of the strategy categories. The small black rectangles at the top and bottom ends of the “whiskers” indicate, respectively, the maximum and minimum strategy uses by the population. The whiskers, themselves (the thin black lines coming from the gray boxes), depict the range of strategy uses by the population. The wider this range (i.e., the longer the whiskers), the less agreement the population has on the use of strategies within the category, and the converse. The gray box depicts the middle fifty percentile. Likewise, the greater the vertical spread of the box, the less agreement among the population on the use of the strategies within the category. Finally, the thin black line found within the gray shaded box indicates the median population frequency use for the category. The median is the central value of an ordered distribution (Brase & Brase, 1978, p. 42). It represents a numerical position where half of all population frequencies are above and half are below.

The dispersion maps in Figure 8 indicate that “Revenue” and “Quality and Productivity” strategies have the most highly concentrated frequency of uses around their medians. This implies a high level of agreement among leaders of the frequency of use (in this case at the higher end of the scale) of strategies within in these categories. “Reshaping” strategies, on the other hand, have a broader dispersion of frequency uses around its median, implying less leadership consensus on the use of these strategies.

Leadership's Past Strategy Behavior
Grouped by FTE Category

Tables 10 through 14 present information on population strategy use grouped by the four Oregon community college FTE categories. These categories are specifically defined and identified in Table 1 and Appendix A.

Past Strategy Use by FTE Category I

A summary of *FTE Category I* leader response frequencies and the percentage rank-ordering of the top 25 strategies used is presented in Table 10. *FTE Category I* leader responses indicated that not all 80 rightsizing strategies have been used. The three strategies not used by *FTE Category I* leaders were (a) Limiting institutional enrollment; (b) Reducing off-campus credit programs; and (c) Reducing weekend programs and classes. As Table 10 indicates, two strategies were used by 100% of *FTE Category I* leaders. The *FTE Category I* leader's level of use of the 80 strategies surveyed was 56%.

Table 10
Top 25 Strategies Used by FTE Category I Colleges

Rank	Strategy	n=12	%
1	Communicate with staff regarding budget constraints.	12	100%
2	Defer equipment purchases.	12	100%
3	Build formal partnerships with other community colleges.	11	92%
4	Communicate with faculty regarding budget constraints.	11	92%
5	Emphasize teamwork across departments.	11	92%
6	Encourage institutional focus on the customer.	11	92%
7	Increase institutional enrollment.	11	92%
8	Increase tuition.	11	92%
9	Involve staff in strategy suggestions for budgetary constraints.	11	92%
10	Perform cost analysis before strategy implementation.	11	92%
11	Build formal partnerships with high schools.	10	83%
12	Communicate with business/industry regarding budget constraints.	10	83%
13	Defer facility and equipment maintenance.	10	83%
14	Encourage development of new credit programs.	10	83%
15	Evaluate institutional mission as it relates to effectiveness.	10	83%
16	Increase the use of adjunct faculty.	10	83%
17	Involve faculty in strategy suggestions for budgetary constraints.	10	83%
18	Offer new courses based on high demand.	10	83%
19	Reallocate positions when they become available.	10	83%
20	Communicate with general public regarding budget constraints.	9	75%
21	Cultivate alternative funding sources.	9	75%
22	Reduce travel budgets.	9	75%
23	Assess quality of academic programs.	8	67%
24	Assess quality of support programs.	8	67%
25	Build formal partnerships with business and industry.	8	67%
FTE Category I past level of use (based on the maximum possible) of the 80 strategies surveyed was 56%.			

Past Strategy Use by FTE Category II

A summary of *FTE Category II* leader response frequencies and the percentage rank-ordering of the top 25 strategies used is presented in Table 11. *FTE Category II* leader responses indicated that not all 80 rightsizing strategies have been used. The two strategies not used by *FTE Category II*

leaders were (a) Limiting institutional enrollment and (b) Reducing off-campus credit programs. As Table 11 indicates, four strategies were used by 100% of *FTE Category II* leaders. The *FTE Category II* leader's level of use of the 80 strategies surveyed was 64%.

Table 11
Top 25 Strategies Used by *FTE Category II* Colleges

Rank	Strategy	n=12	%
1	Build formal partnerships with business and industry.	12	100%
2	Communicate with faculty regarding budget constraints.	12	100%
3	Communicate with staff regarding budget constraints.	12	100%
4	Increase tuition.	12	100%
5	Build formal partnerships with high schools.	11	92%
6	Emphasize teamwork across departments.	11	92%
7	Reallocate positions when they become available.	11	92%
8	Reduce positions through attrition.	11	92%
9	Communicate with business/industry regarding budget constraints.	10	83%
10	Communicate with general public regarding budget constraints.	10	83%
11	Cultivate alternative funding sources.	10	83%
12	Implement Total Quality Management concepts.	10	83%
13	Increase institutional enrollment.	10	83%
14	Increase reliance on technology in administrative functions.	10	83%
15	Involve staff in strategy suggestions for budgetary constraints.	10	83%
16	Reduce administrative costs.	10	83%
17	Reduce funds for copying expenditures.	10	83%
18	Reduce number of support staff positions.	10	83%
19	Reduce summer school expenditures.	10	83%
20	Reduce travel budgets.	10	83%
21	Reengineer work processes.	10	83%
22	Assess quality of academic programs.	9	75%
23	Build formal partnerships with four-year colleges.	9	75%
24	Conduct mission-based reviews of academic areas.	9	75%
25	Contract out services previously provided internally.	9	75%
<p>FTE Category II past level of use (based on the maximum possible) of the 80 strategies surveyed was 64%.</p>			

Past Strategy Use by FTE Category III

A summary of *FTE Category III* leader response frequencies and the percentage rank-ordering of the top 25 strategies used is presented in Table 12. *FTE Category III* leader responses indicated that all 80 rightsizing strategies have been used to some extent. As Table 12 indicates, eleven strategies were used by 100% of *FTE Category III* leaders. The *FTE Category III* leader's level of use of the 80 strategies surveyed was 68%.

Past Strategy Use by FTE Category IV

A summary of *FTE Category IV* leader response frequencies and the percentage rank-ordering of top 25 strategies used is presented in Table 13. *FTE Category IV* leader responses indicated that all 80 rightsizing strategies surveyed have been used to some extent. As Table 13 indicates, twenty-one strategies were used by 100% of *FTE Category IV* leaders. The *FTE Category IV* leader's level of use of the 80 strategies surveyed was 71%.

Table 12
Top 25 Strategies Used by FTE Category III Colleges

Rank	Strategy	n=12	%
1	Build formal partnerships with business and industry.	12	100%
2	Communicate with faculty regarding budget constraints.	12	100%
3	Communicate with staff regarding budget constraints.	12	100%
4	Encourage institutional focus on the customer.	12	100%
5	Increase fund-raising and development efforts.	12	100%
6	Increase tuition.	12	100%
7	Involve staff in strategy suggestions for budgetary constraints.	12	100%
8	Reallocate positions when they become available.	12	100%
9	Reduce administrative costs.	12	100%
10	Reduce positions through attrition.	12	100%
11	Reengineer work processes.	12	100%
12	Assess quality of academic programs.	11	92%
13	Build formal partnerships with four-year colleges.	11	92%
14	Build formal partnerships with high schools.	11	92%
15	Communicate with students regarding budget constraints.	11	92%
16	Cultivate alternative funding sources.	11	92%
17	Emphasize teamwork across departments.	11	92%
18	Increase reliance on technology in administrative functions.	11	92%
19	Increase reliance on technology in student services areas.	11	92%
20	Limit enrollment in certain programs.	11	92%
21	Offer new courses based on high demand.	11	92%
22	Perform cost analysis before strategy implementation.	11	92%
23	Communicate with general public regarding budget constraints.	10	83%
24	Encourage development of new credit programs.	10	83%
25	Increase institutional enrollment.	10	83%
FTE Category III past level of use (based on the maximum possible) of the 80 strategies surveyed was 68%.			

Table 13
Top 25 Strategies Used by FTE Category IV Colleges

Rank	Strategy	n=12	%
1	Assess quality of academic programs.	12	100%
2	Assess quality of support programs.	12	100%
3	Build formal partnerships with business and industry.	12	100%
4	Build formal partnerships with high schools.	12	100%
5	Communicate with faculty regarding budget constraints.	12	100%
6	Communicate with staff regarding budget constraints.	12	100%
7	Cultivate alternative funding sources.	12	100%
8	Emphasize teamwork across departments.	12	100%
9	Encourage development of new credit programs.	12	100%
10	Encourage institutional focus on the customer.	12	100%
11	Increase fund-raising and development efforts.	12	100%
12	Increase institutional enrollment.	12	100%
13	Increase reliance on technology in administrative functions.	12	100%
14	Increase reliance on technology in student services areas.	12	100%
15	Increase student fees.	12	100%
16	Increase tuition.	12	100%
17	Involve faculty in strategy suggestions for budgetary constraints.	12	100%
18	Involve staff in strategy suggestions for budgetary constraints.	12	100%
19	Offer new courses based on high demand.	12	100%
20	Reduce administrative costs.	12	100%
21	Reduce positions through attrition.	12	100%
22	Build formal partnerships with four-year colleges.	11	92%
23	Build formal partnerships with other community colleges.	11	92%
24	Communicate with general public regarding budget constraints.	11	92%
25	Defer equipment purchases.	11	92%

FTE Category IV past level of use (based on the maximum possible) of the 80 strategies surveyed was 71%.

Past Strategy Use by All FTE Categories

Table 14 summarizes the strategy use by all four FTE categories relative to the top 25 strategies used by *FTE Category IV*. Figure 9 summarizes the overall level of strategy use by all FTE categories.

Table 14
 Top 25 Strategies Used by FTE Category IV
 with Relative Strategy Use by FTE Categories I, II, and III

	Strategy	FTE Categories			
		I	II	III	IV
		<1500 n=12	1500- 2499 n=12	2500- 5499 n=12	5500≥ n=12
1	Assess quality of academic programs.	67%	75%	92%	100%
2	Assess quality of support programs.	67%	67%	75%	100%
3	Build formal partnerships with business and industry.	67%	100%	100%	100%
4	Build formal partnerships with high schools.	83%	92%	92%	100%
5	Communicate with faculty regarding budget constraints.	92%	100%	100%	100%
6	Communicate with staff regarding budget constraints.	100%	100%	100%	100%
7	Cultivate alternative funding sources.	75%	83%	92%	100%
8	Emphasize teamwork across departments.	92%	92%	92%	100%
9	Encourage development of new credit programs.	83%	75%	83%	100%
10	Encourage institutional focus on the customer.	92%	75%	100%	100%
11	Increase fund-raising and development efforts.	50%	75%	100%	100%
12	Increase institutional enrollment.	92%	83%	83%	100%
13	Increase reliance on technology in admin. functions.	58%	83%	92%	100%
14	Increase reliance on technology in student services.	50%	42%	92%	100%
15	Increase student fees.	67%	75%	75%	100%
16	Increase tuition.	92%	100%	100%	100%
17	Involve faculty in strategy for budgetary constraints.	83%	75%	83%	100%
18	Involve staff in strategy for budgetary constraints.	92%	83%	100%	100%
19	Offer new courses based on high demand.	83%	75%	92%	100%
20	Reduce administrative costs.	67%	83%	100%	100%
21	Reduce positions through attrition.	67%	92%	100%	100%
22	Build formal partnerships with four-year colleges.	33%	75%	92%	92%
23	Build formal partnerships with other community	92%	33%	75%	92%
24	Communicate with general public regarding budget	75%	83%	83%	92%
25	Defer equipment purchases.	100%	67%	75%	92%

Figure 9
Rightsizing Strategy Utilization Levels by FTE Categories

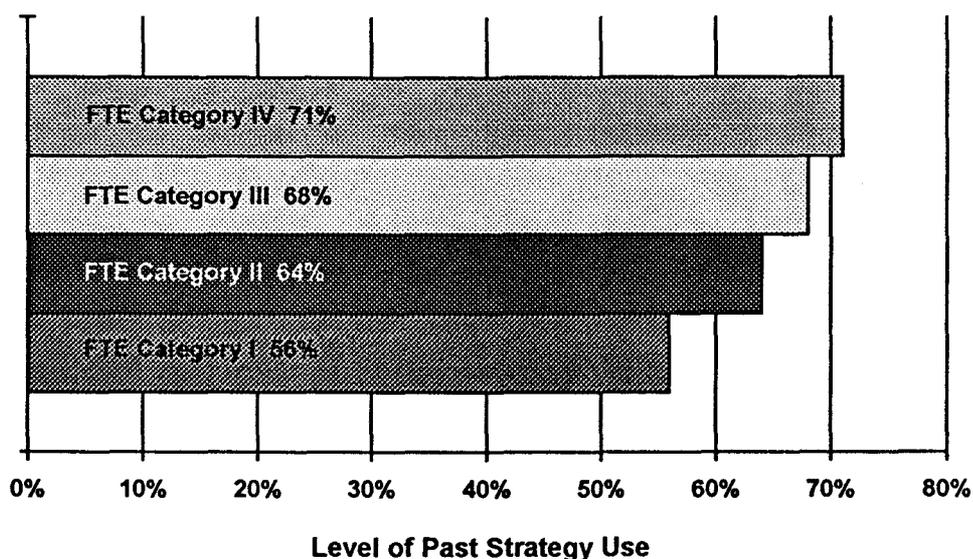
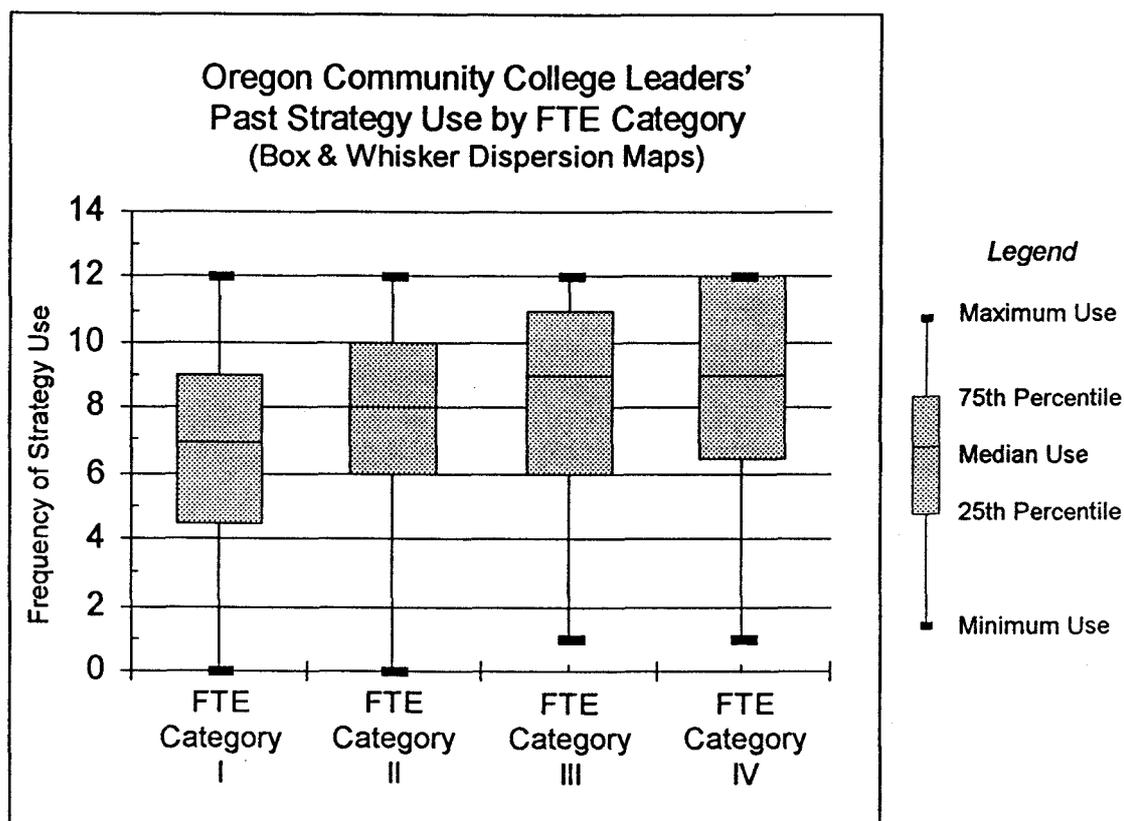


Figure 10 presents summary information on Oregon Community College past strategy use grouped by FTE Category. The figure provides dispersion maps of frequency distributions within each category. Related statistical information is also provided in the figure. The dispersion maps indicate that strategy use within the four categories was fairly broad. The maps also suggest that as colleges gain student FTE, there is greater need and/or opportunity to employ rightsizing strategies more frequently. This finding is consistent with information presented in Table 14. Although this was the case, a Chi Square Test of Independence could not reject the null hypothesis (H_0) at the .05 level of significance that past rightsizing strategy use and the grouping of strategies by FTE Categories were independent.

Figure 10
 Summary Frequency Dispersion Maps and Statistics
 for Past Strategy Use by FTE Categories



Summary Statistics	FTE Category			
	I n=12	II n=12	III n=12	IV n=12
Number of Strategies in Survey	80	80	80	80
Mean Strategy Use by Category	6.7	7.6	8.2	8.5
Standard Deviation	3.1	2.8	3.0	3.2
Maximum Strategy Use by Category	12	12	12	12
75th Percentile of Strategy Use by Category	9	10	11	12
Median Strategy Use by Category	7	8	9	9
25th Percentile of Strategy Use by Category	4.5	6	6	6.5
Minimum Strategy Use by Category	0	0	1	1

Leadership's Past Strategy Behavior Grouped by Leadership Area

In this section, past strategy use information is presented by leadership area. Tables 15 through 18 present information broken out by the 3 leadership areas of instructional services, college services, and student services.

Theoretically, there should be no differences among the 3 leaders' responses regarding the colleges' use of particular strategies. Pragmatically, however, because of the availability of information, the leaders' knowledge of institutions, etc., responses from leaders from even the same college may vary. Such was the case in this study.

Past Strategy Use Reported by Instructional Deans

A summary of the 16 *Instructional Dean* response frequencies and the percentage rank-ordering of the top 25 strategies "reported" used is presented in Table 15. *Instructional Dean* responses indicated that all 80 rightsizing strategies have been used to some extent. As Table 15 indicates, five strategies were used by 100% of college *Instructional Deans*. The *Instructional Dean* level of use of the 80 strategies surveyed was 66%.

Table 15
Top 25 Strategies Reported "Used" by Instructional Deans

Rank	Strategy	n=16	%
1	Communicate with faculty regarding budget constraints.	16	100%
2	Communicate with staff regarding budget constraints.	16	100%
3	Increase tuition.	16	100%
4	Perform cost analysis before strategy implementation.	16	100%
5	Reallocate positions when they become available.	16	100%
6	Build formal partnerships with high schools.	15	94%
7	Communicate with business/industry regarding budget constraints.	15	94%
8	Cultivate alternative funding sources.	15	94%
9	Defer equipment purchases.	15	94%
10	Emphasize teamwork across departments.	15	94%
11	Increase institutional enrollment.	15	94%
12	Involve staff in strategy suggestions for budgetary constraints.	15	94%
13	Reduce positions through attrition.	15	94%
14	Build formal partnerships with business and industry.	14	88%
15	Build formal partnerships with other community colleges.	14	88%
16	Communicate with general public regarding budget constraints.	14	88%
17	Increase fund-raising and development efforts.	14	88%
18	Increase student fees.	14	88%
19	Increase the use of adjunct faculty.	14	88%
20	Reduce administrative costs.	14	88%
21	Reduce number of administrative positions.	14	88%
22	Assess quality of academic programs.	13	81%
23	Conduct enrollment management studies.	13	81%
24	Encourage institutional focus on the customer.	13	81%
25	Increase reliance on technology in administrative functions.	13	81%

Instructional Dean reported past level of use (based on the maximum possible) of the 80 strategies surveyed was 66%.

Past Strategy Use Reported by Business Officers

A summary of the 16 *Business Officer* response frequencies and the percentage rank-ordering of the top 25 strategies "reported" used is presented in Table 16. *Business Officer* responses indicated that all 80 rightsizing strategies have been used to some extent. As Table 16 indicates, five

strategies were used by 100% of *Business Officers*. The *Business Officer* level of use of the 80 strategies surveyed was 65%.

Table 16
Top 25 Strategies Reported "Used" by Business Officers

Rank	Strategy	n=16	%
1	Communicate with staff regarding budget constraints.	16	100%
2	Encourage institutional focus on the customer.	16	100%
3	Involve staff in strategy suggestions for budgetary constraints.	16	100%
4	Offer new courses based on high demand.	16	100%
5	Reduce administrative costs.	16	100%
6	Build formal partnerships with business and industry.	15	94%
7	Build formal partnerships with high schools.	15	94%
8	Communicate with faculty regarding budget constraints.	15	94%
9	Emphasize teamwork across departments.	15	94%
10	Encourage development of new credit programs.	15	94%
11	Increase institutional enrollment.	15	94%
12	Increase reliance on technology in administrative functions.	15	94%
13	Increase tuition.	15	94%
14	Reallocate positions when they become available.	15	94%
15	Assess quality of academic programs.	14	88%
16	Cultivate alternative funding sources.	14	88%
17	Evaluate institutional mission as it relates to effectiveness.	14	88%
18	Perform cost analysis before strategy implementation.	14	88%
19	Reduce positions through attrition.	14	88%
20	Conduct mission-based reviews of academic areas.	13	81%
21	Defer equipment purchases.	13	81%
22	Increase fund-raising and development efforts.	13	81%
23	Involve faculty in strategy suggestions for budgetary constraints.	13	81%
24	Provide mechanisms for ongoing customer feedback.	13	81%
25	Reduce number of support staff positions.	13	81%
Business Officer reported past level of use (based on the maximum possible) of the 80 strategies surveyed was 65%.			

Past Strategy Use Reported by Deans of Students

Table 17 presents a summary of the 16 *Deans of Students* response frequencies and the percentage rank-ordering of the top 25 strategies "reported" used. *Deans of Students* responses indicated that all 80 rightsizing strategies have been used. The *Deans of Student* level of use was 62%.

Table 17
Top 25 Strategies Reported "Used" by Deans of Students

Rank	Strategy	n=16	%
1	Communicate with faculty regarding budget constraints.	16	100%
2	Communicate with staff regarding budget constraints.	16	100%
3	Increase tuition.	16	100%
4	Build formal partnerships with business and industry.	15	94%
5	Emphasize teamwork across departments.	15	94%
6	Encourage institutional focus on the customer.	15	94%
7	Involve faculty in strategy suggestions for budgetary constraints.	15	94%
8	Build formal partnerships with high schools.	14	88%
9	Communicate with general public regarding budget constraints.	14	88%
10	Encourage development of new credit programs.	14	88%
11	Involve staff in strategy suggestions for budgetary constraints.	14	88%
12	Offer new courses based on high demand.	14	88%
13	Reduce positions through attrition.	14	88%
14	Reengineer work processes.	14	88%
15	Assess quality of academic programs.	13	81%
16	Assess quality of support programs.	13	81%
17	Communicate with students regarding budget constraints.	13	81%
18	Cultivate alternative funding sources.	13	81%
19	Increase institutional enrollment.	13	81%
20	Reallocate positions when they become available.	13	81%
21	Build formal partnerships with four-year colleges.	12	75%
22	Conduct mission-based reviews of academic areas.	12	75%
23	Defer equipment purchases.	12	75%
24	Defer facility and equipment maintenance.	12	75%
25	Increase fund-raising and development efforts.	12	75%

Deans of Students reported past level of use (based on the maximum possible) of the 80 strategies surveyed was 62%.

Past Strategy Use Reported by All Leadership Areas

Table 18 summarize all leadership area strategy uses relative to *Instructional Deans*. Figure 11 summarizes strategy use levels by leader area.

Table 18
Top 25 Strategies Reported "Used" by Instructional Deans with Relative Strategy Use by Business Officers and Deans of Students

Rank	Strategy	Operational Leadership Categories		
		Deans of Stdts. n=16	Bus. Mgrs. n=16	Deans of Inst. n=16
1	Communicate with faculty regarding budget constraints.	100%	94%	100%
2	Communicate with staff regarding budget constraints.	100%	100%	100%
3	Increase tuition.	100%	94%	100%
4	Perform cost analysis before strategy implementation.	75%	88%	100%
5	Reallocate positions when they become available.	81%	94%	100%
6	Build formal partnerships with high schools.	88%	94%	94%
7	Communicate with industry regarding budget constraints.	69%	69%	94%
8	Cultivate alternative funding sources.	81%	88%	94%
9	Defer equipment purchases.	75%	81%	94%
10	Emphasize teamwork across departments.	94%	94%	94%
11	Increase institutional enrollment.	81%	94%	94%
12	Involve staff in strategy for budgetary constraints.	88%	100%	94%
13	Reduce positions through attrition.	88%	88%	94%
14	Build formal partnerships with business and industry.	94%	94%	88%
15	Build formal partnerships with other community colleges.	56%	75%	88%
16	Communicate with general public regarding budget	88%	75%	88%
17	Increase fund-raising and development efforts.	75%	81%	88%
18	Increase student fees.	75%	75%	88%
19	Increase the use of adjunct faculty.	44%	75%	88%
20	Reduce administrative costs.	75%	100%	88%
21	Reduce number of administrative positions.	75%	69%	88%
22	Assess quality of academic programs.	81%	88%	81%
23	Conduct enrollment management studies.	69%	50%	81%
24	Encourage institutional focus on the customer.	94%	100%	81%
25	Increase reliance on technology in admin functions.	75%	94%	81%

Figure 11
College Leadership Area Past Strategy Use Levels

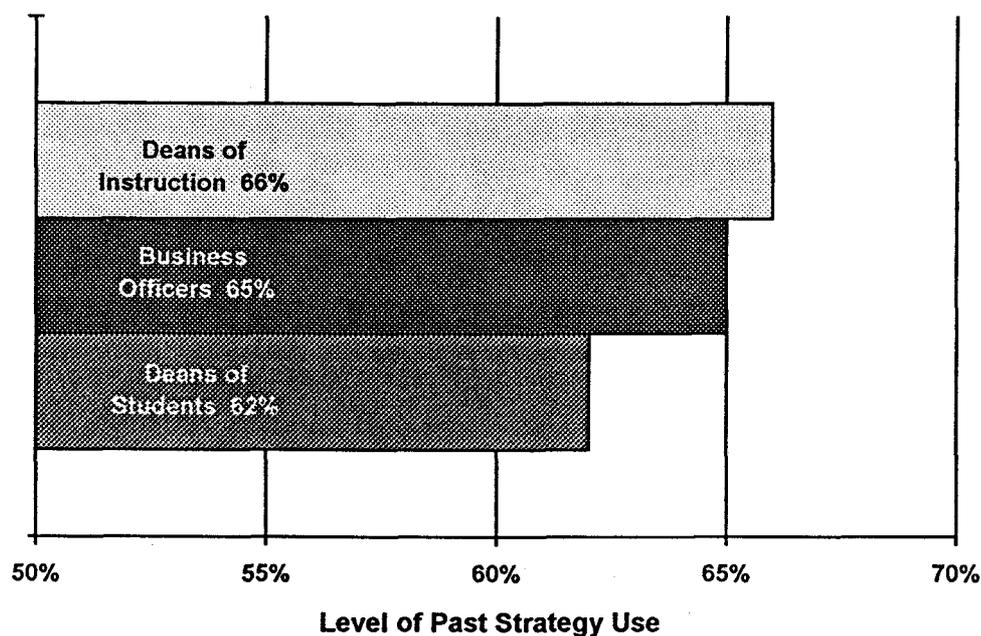
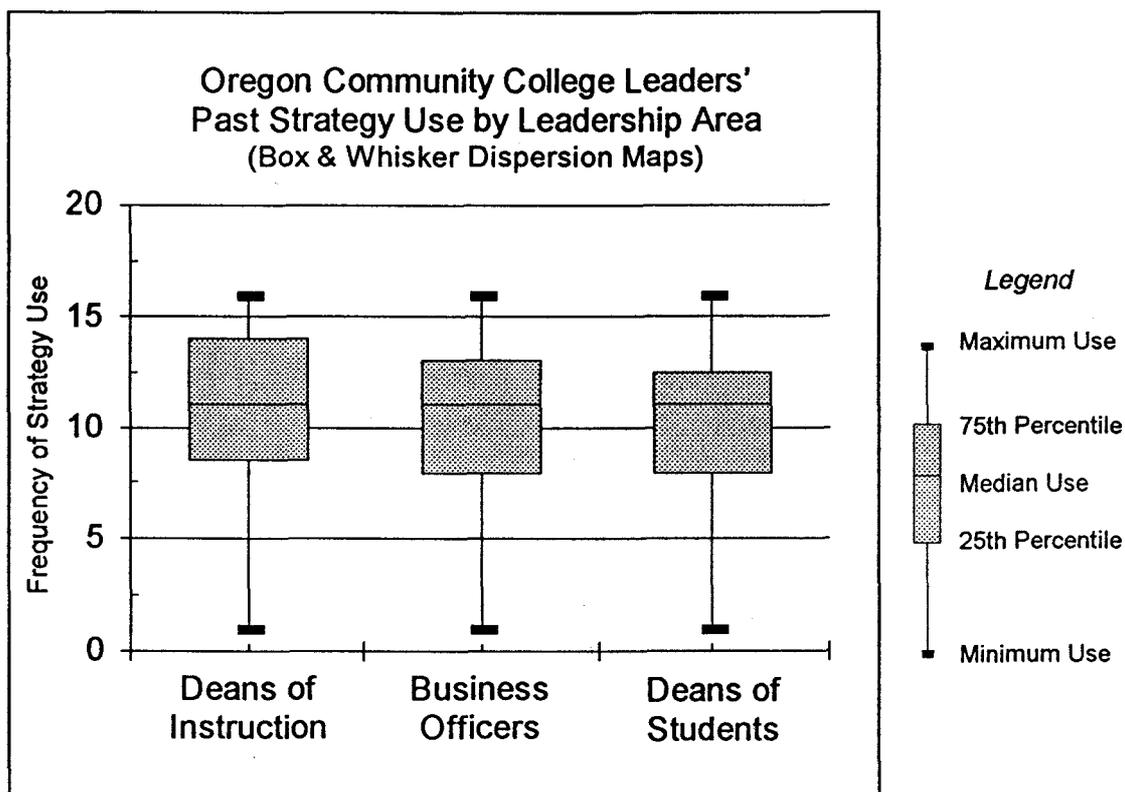


Figure 12 presents summary information on past strategy use grouped by leadership area. The figure provides dispersion maps of frequency distributions within each area. Related statistical information is also provided in the figure. The dispersion maps indicate that distributions within the three areas are very similar. This is consistent with the fact that the three leadership areas were all reporting the same institutional information. As expected, the results of a Chi Square Test of Independence could not reject the null hypothesis (H_0) at the .05 level of significance that past rightsizing strategy use and the grouping of strategies by leadership area were independent. Differences can only be attributed to sampling variance and not differences in underlying populations.

Figure 12
 Summary Frequency Dispersion Maps and Statistics
 for Past Strategy Use by Leadership Areas



Summary Statistics	Leadership Area		
	Deans of Instruction n=16	Business Officers n=16	Deans of Students n=16
Number of Strategies Surveyed	80	80	80
Mean Use of Strategies by Leaders	10.6	10.5	10.0
Standard Deviation	3.9	3.8	3.7
Maximum Strategy Use by Leaders	16	16	16
75th Percentile of Strategy Use	14	13	12.5
Median Strategy Use by Leaders	11	11	11
25th Percentile of Strategy Use	8.5	8	8
Minimum Strategy Use by Taxonomy	1	1	1

Leadership's Past Strategy Behavior
Grouped by "Equity" and "Floored" Status

Tables 19 through 21 present information related to how leaders representing "Equity" and "Floored" colleges responded to strategies used. "Equity" colleges are those having relatively low per student FTE costs as calculated by state prescription. "Floored" colleges, on the other hand under the same formulae, have relatively high per student FTE costs. On June 30, 1995, the Oregon State Board of Education adopted an allocation formula holding state appropriations level for "Floored" colleges. The "Floored" concept holds these colleges "harmless" by not permitting state allocations to dip below prior year levels. Although this is the case, these institutions will not participate in increases in state general fund appropriations to community colleges until such time as costs can be spread among greater numbers of students and/or can be reduced relative to current student FTE.

A summary of responses from the 27 leaders representing "Equity" Colleges is presented in Table 19. Both response frequencies and a percentage rank-ordering of the top 25 strategies used are reported in the table. Responses by "Equity" College leaders indicated that all 80 rightsizing strategies have been used to some extent. Strategy use ranged from a low of 11% ("Reduce off campus credit programs") to a high of 100%. As the table indicates, two strategies were used by 100% of "Equity" College leaders. The "Equity" College level of use of the 80 strategies surveyed was 64%.

Table 19
Top 25 Strategies Used by "Equity" Colleges

Rank	Strategy	n=27	%
1	Communicate with staff regarding budget constraints.	27	100%
2	Increase tuition.	27	100%
3	Communicate with faculty regarding budget constraints.	26	96%
4	Encourage institutional focus on the customer.	26	96%
5	Involve staff in strategy suggestions for budgetary constraints.	26	96%
6	Build formal partnerships with high schools.	25	93%
7	Defer equipment purchases.	25	93%
8	Emphasize teamwork across departments.	25	93%
9	Increase institutional enrollment.	25	93%
10	Perform cost analysis before strategy implementation.	25	93%
11	Reduce administrative costs.	25	93%
12	Build formal partnerships with other community colleges.	24	89%
13	Communicate with general public regarding budget constraints.	24	89%
14	Cultivate alternative funding sources.	24	89%
15	Offer new courses based on high demand.	24	89%
16	Reallocate positions when they become available.	24	89%
17	Reengineer work processes.	24	89%
18	Assess quality of academic programs.	23	85%
19	Build formal partnerships with business and industry.	23	85%
20	Encourage development of new credit programs.	23	85%
21	Involve faculty in strategy suggestions for budgetary constraints.	23	85%
22	Provide mechanisms for ongoing customer feedback.	23	85%
23	Reduce positions through attrition.	23	85%
24	Assess quality of support programs.	22	81%
25	Defer facility and equipment maintenance.	22	81%
<p>"Equity" College past level of use (based on the maximum possible) of the 80 strategies surveyed was 64%.</p>			

A summary of responses from the 21 leaders representing "Floored" Colleges is presented in Table 20. Both response frequencies and a percentage rank-ordering of the top 25 strategies used are reported in the table. Responses by "Floored" College leaders indicated that all 80 rightsizing strategies have been used to some extent. As the table indicates, three

strategies were used by 100% of "Floored" College leaders. The "Floored" College level of use of the 80 strategies surveyed was 66%.

Table 20
Top 25 Strategies Used by "Floored" Colleges

Rank	Strategy	n=21	%
1	Build formal partnerships with business and industry.	21	100%
2	Communicate with faculty regarding budget constraints.	21	100%
3	Communicate with staff regarding budget constraints.	21	100%
4	Emphasize teamwork across departments.	20	95%
5	Increase tuition.	20	95%
6	Reallocate positions when they become available.	20	95%
7	Reduce positions through attrition.	20	95%
8	Build formal partnerships with high schools.	19	90%
9	Increase reliance on technology in administrative functions.	19	90%
10	Involve staff in strategy suggestions for budgetary constraints.	19	90%
11	Reduce number of support staff positions.	19	90%
12	Cultivate alternative funding sources.	18	86%
13	Encourage development of new credit programs.	18	86%
14	Encourage institutional focus on the customer.	18	86%
15	Implement Total Quality Management concepts.	18	86%
16	Increase fund-raising and development efforts.	18	86%
17	Increase institutional enrollment.	18	86%
18	Involve faculty in strategy suggestions for budgetary constraints.	18	86%
19	Offer new courses based on high demand.	18	86%
20	Assess quality of academic programs.	17	81%
21	Build formal partnerships with four-year colleges.	17	81%
22	Communicate with business/industry regarding budget constraints.	17	81%
23	Increase student fees.	17	81%
24	Perform cost analysis before strategy implementation.	17	81%
25	Reduce administrative costs.	17	81%

"Floored" College past level of use (based on the maximum possible) of the 80 strategies surveyed was 66%.

Table 21 summarizes all strategy uses relative to the top 25 strategies used by "Equity" Colleges. Figure 13 summarizes the overall level of strategy use by both "Equity" Colleges and "Floored" Colleges.

Table 21
Top 25 Strategies Used by "Equity" Colleges
with Relative "Floored" College Use

Rank	Strategy	"Floored" n=21	"Equity" n=27
1	Communicate with staff regarding budget constraints.	100%	100%
2	Increase tuition.	95%	100%
3	Communicate with faculty regarding budget constraints.	100%	96%
4	Encourage institutional focus on the customer.	86%	96%
5	Involve staff in strategy suggestions for budgetary constraints.	90%	96%
6	Build formal partnerships with high schools.	90%	93%
7	Defer equipment purchases.	71%	93%
8	Emphasize teamwork across departments.	95%	93%
9	Increase institutional enrollment.	86%	93%
10	Perform cost analysis before strategy implementation.	81%	93%
11	Reduce administrative costs.	81%	93%
12	Build formal partnerships with other community colleges.	52%	89%
13	Communicate with general public regarding budget constraints.	76%	89%
14	Cultivate alternative funding sources.	86%	89%
15	Offer new courses based on high demand.	86%	89%
16	Reallocate positions when they become available.	95%	89%
17	Reengineer work processes.	76%	89%
18	Assess quality of academic programs.	81%	85%
19	Build formal partnerships with business and industry.	100%	85%
20	Encourage development of new credit programs.	86%	85%
21	Involve faculty in suggestions for budgetary constraints.	86%	85%
22	Provide mechanisms for ongoing customer feedback.	52%	85%
23	Reduce positions through attrition.	95%	85%
24	Assess quality of support programs.	71%	81%
25	Defer facility and equipment maintenance.	57%	81%

Figure 13
Rightsizing Strategy Use by "Equity" and
"Floored" College Categories

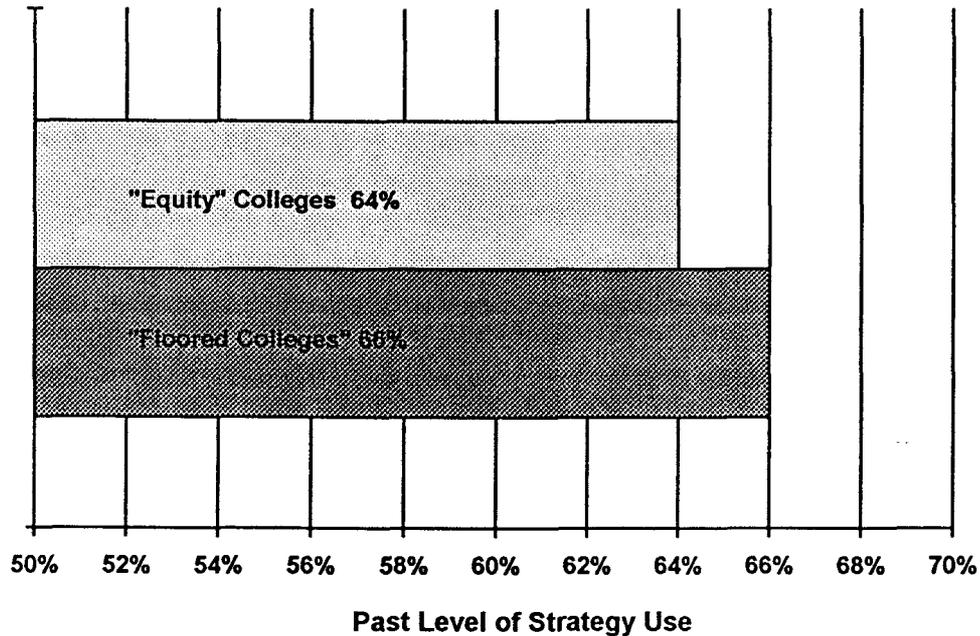
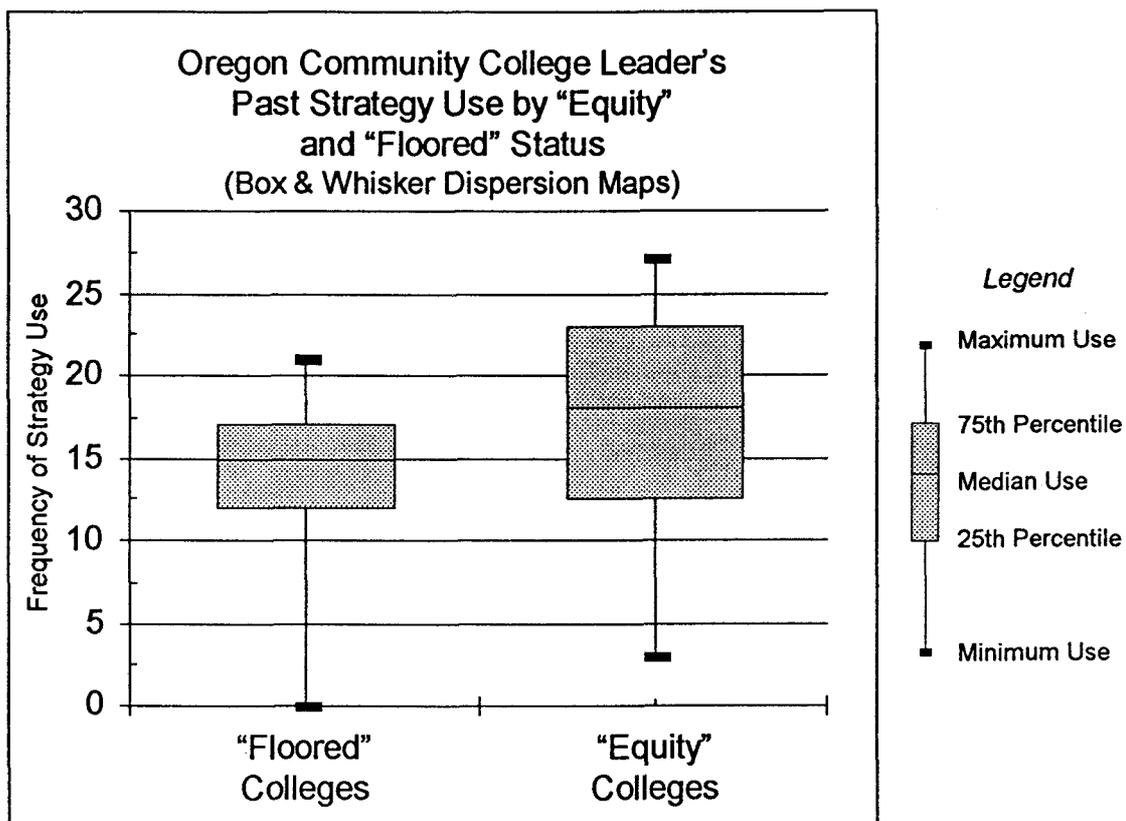


Figure 14 presents summary information on Oregon Community College past strategy use grouped by "Equity" and "Floored" college status. The figure provides frequency dispersion maps of strategy use for each college classification. Related statistical information is also provided in the figure.

In general, "Floored" colleges appear to make use of fewer strategies at a consistently high frequency. This causes the 50 percentile of uses surrounding the median to be more concentrated. "Equity" colleges also appear to make use of strategies at higher frequencies, but do so with less concentration than "Floored" colleges. Accordingly, the 50 percentile of frequencies surrounding the median for "Equity" colleges is more disperse.

Figure 14
 Summary Frequency Dispersion Maps and Statistics
 for Past Strategy Use by "Equity" and "Floored" Colleges



Summary Statistics	College Status	
	"Floored" n=21	"Equity" n=27
Number of Strategies in Survey	80	80
Mean Strategy Past Use by College Status Category	13.8	17.2
Standard Deviation	4.9	6.5
Maximum Frequency of Strategy Use	21	27
75th Percentile of Strategy Use	17	23
Median of Strategy Use	15	18
25th Percentile of Strategy Use	12	12.5
Minimum Frequency of Strategy Use	0	3

Research Question 2

What rightsizing strategies do Oregon's community college leaders plan to employ to cope with the changing environment?

Summary of Significant Findings for Question 2

- (a) Strategies to *build formal partnerships and communicate budgetary problems* received high indicated planned use (see Tables 22, 28, 33, 37, and 40).
- (b) Strategies to *increase fund raising efforts, cultivate alternative funding sources, increase enrollment, and increase tuition* were popular planned strategies (see Tables 22, 23, and 33)
- (c) By strategy taxonomy, leaders planned to use *"quality" culture development, process reengineering, quality and productivity incentives, and revenue enhancing* strategies most of all, with the planned use level of *cost cutting* strategies less than half that of these strategies (see Figure 15).
- (d) The smaller FTE Categories I and II had a higher overall planned level of strategy use than past use, while the converse was true for larger FTE Categories III and IV (see Figures 9 and 17).
- (e) Leadership areas of responsibility indicated a plan to make extensive use of strategies to *build a "quality culture" and to enhance revenues* (see Table 33).

Detailed Data Presentation and Analysis

Tables 22 through 41 summarize leader responses to the Phase I survey, relating to planned strategy use. As with past strategy data, information presented in these tables examines four dimensions of planned strategy use: (a) population responses grouped by strategy taxonomy; (b) population responses grouped by college FTE Category; (c) population responses grouped by leadership area; and (d) population responses grouped by college "Equity" and "Floored" status. Detailed descriptions and definitions of each of these groupings are found in Chapter 3. Analyzing planned strategy use in these dimensions along with past strategy use analysis provided a comprehensive profile of leadership rightsizing behavior.

Leadership's Planned Strategy Behavior Grouped by Taxonomy

The information presented in the following tables was extracted from responses coded "yes" by respondents to "Plan to Use" in the Phase I survey. Overall, 3,840 affirmative indications (48 leaders times 80 strategies) were possible. Of these, 2,505 affirmative indications to planned strategy use were made. This represented a 65% overall level of planned use of strategies surveyed.

Population planned use of specific strategies ranged from a minimum of 3 leaders (6%) using strategies to “Limit institutional enrollment” and “Reduce off campus credit programs” to a maximum of 48 leaders (100%) using strategies to “Build formal partnerships with business and industry,” “Communicate with faculty regarding budget constraints,” “Communicate with staff regarding budget constraints,” and “Increase fund-raising and development efforts.” Table 22 provides a percentage rank-ordering of the top 25 strategies planned for use by all Oregon community colleges.

Tables 23 through 28 present strategy use information corresponding to the taxonomy of rightsizing strategies in Figure 4. This taxonomy includes the two broad categories of *Conventional* and *Innovative* strategies and the specific subcategorizes of *Enhancing Revenue*, *Reducing Costs*, *Reshaping the Institution*, *Developing Quality and Productivity Incentives*, *Reengineering Work Processes*, and *Building a “Quality” Culture*.

Table 22
Top 25 Strategies Planned for Use

Rank	Strategy	N=48	%
1	Build formal partnerships with business and industry.	48	100%
2	Communicate with faculty regarding budget constraints.	48	100%
3	Communicate with staff regarding budget constraints.	48	100%
4	Increase fund-raising and development efforts.	48	100%
5	Cultivate alternative funding sources.	47	98%
6	Increase institutional enrollment.	47	98%
7	Involve staff in strategy suggestions for budgetary constraints.	47	98%
8	Offer new courses based on high demand.	47	98%
9	Assess quality of academic programs.	46	96%
10	Build formal partnerships with high schools.	46	96%
11	Emphasize teamwork across departments.	46	96%
12	Encourage institutional focus on the customer.	46	96%
13	Increase reliance on technology in administrative functions.	46	96%
14	Increase tuition.	46	96%
15	Assess quality of support programs.	45	94%
16	Communicate with business/industry regarding budget constraints.	45	94%
17	Conduct mission-based reviews of academic areas.	45	94%
18	Evaluate institutional mission as it relates to effectiveness.	45	94%
19	Increase reliance on technology in teaching and learning.	45	94%
20	Involve faculty in strategy suggestions for budgetary constraints.	45	94%
21	Perform cost analysis before strategy implementation.	45	94%
22	Reallocate positions when they become available.	44	92%
23	Reengineer work processes.	44	92%
24	Encourage development of new credit programs.	43	90%
25	Provide mechanisms for ongoing customer feedback.	43	90%
Leadership's planned level of use (based on the maximum possible) of the 80 strategies surveyed was 65%.			

Planned Use of Conventional Strategies

Tables 23 and 24 present *conventional strategies* planned for use by the population. In general, *conventional strategies* are those relating to enhancing revenues or reducing costs.

Planned Revenue Enhancing Strategies

A summary of leader response frequencies and the percentage rank-ordering of *revenue enhancing* strategies planned for use is presented in Table 23. Population responses indicated that all eight *revenue enhancing* strategies will be used to some extent. Planned strategy use in this category ranged from a low of 27% ("Initiate or increase parking fees") to a high of 100% ("Increase fund-raising and development efforts"). The leadership's planned level of use of the eight *revenue enhancing* strategies surveyed was 83%.

Table 23
Revenue Enhancing Strategies Planned for Use

Rank	Strategy	N=48	%
1	Increase fund-raising and development efforts.	48	100%
2	Cultivate alternative funding sources.	47	98%
3	Increase institutional enrollment.	47	98%
4	Increase tuition.	46	96%
5	Communicate with business/industry regarding budget constraints.	45	94%
6	Conduct enrollment management studies.	39	81%
7	Increase student fees.	32	67%
8	Initiate or increase parking fees.	13	27%

Leadership's planned level of use (based on the maximum possible) of the 8 revenue enhancing strategies surveyed was 83%.

Planned Cost Reducing Strategies

Table 24 summarizes the leader response frequencies and the percentage rank-ordering of *cost reducing* strategies planned for use. Responses indicated that all 30 *cost reducing* strategies will be used to some extent. Planned strategy use in this category ranged from a low of 6% ("Limit institutional enrollment," "Reduce off campus credit programs," and "Reduce weekend programs and classes") to a high of 90% ("Reduce administrative costs"). The leadership's planned level of use of the 30 *cost reducing* strategies surveyed was 41%. The leadership's overall planned level of use of all 38 *conventional strategies* was 50%.

Planned Use of Innovative Strategies

Tables 25 through 28 present *innovative strategies* planned for use by the population. In general, *innovative strategies* are those relating to reshaping the institution, developing quality and productivity incentives, reengineering work processes, and building a "quality" culture.

Table 24
Cost Reducing Strategies Planned for Use

Rank	Strategy	N=48	%
1	Reduce administrative costs.	43	90%
2	Reduce positions through attrition.	37	77%
3	Reduce travel budgets.	32	67%
4	Defer equipment purchases.	32	67%
5	Increase the use of adjunct faculty.	32	67%
6	Reduce number of support staff positions.	30	63%
7	Limit enrollment in certain programs.	30	63%
8	Increase student/faculty ratios.	28	58%
9	Reduce number of administrative positions.	26	54%
10	Reduce number of part-time positions.	23	48%
11	Initiate a hiring freeze.	22	46%
12	Defer facility and equipment maintenance.	22	46%
13	Reduce funds for copying expenditures.	22	46%
14	Eliminate or reduce bulk mailings.	21	44%
15	Reduce secretarial services.	20	42%
16	Reduce summer school expenditures.	20	42%
17	Reduce funding for student services.	19	40%
18	Reduce custodial services.	19	40%
19	Initiate across-the-board cuts.	17	35%
20	Reduce staffing in student services.	16	33%
21	Reduce funds for telephone expenditures.	16	33%
22	Reduce funds for professional development.	15	31%
23	Reduce positions through layoffs.	13	27%
24	Reduce funding for library.	9	19%
25	Reduce library hours.	7	15%
26	Encourage sabbatical leaves without pay.	7	15%
27	Reduce staffing in library services.	6	13%
28	Limit institutional enrollment.	3	6%
29	Reduce off-campus credit programs.	3	6%
30	Reduce weekend programs and classes.	3	6%

Leadership's planned level of use (based on the maximum possible) of the 30 cost reducing strategies surveyed was 41%.

Planned Institutional Reshaping Strategies

A summary of leader response frequencies and the percentage rank-ordering of *institutional reshaping* strategies planned for use is presented in Table 25. Population responses indicated that all 11 *institutional reshaping* strategies will be used to some extent. Planned strategy use in this category ranged from a low of 21% ("Reduce developmental and adult basic education programs") to a high of 98% ("Offer new courses based on high demand"). The leadership's planned level of use of the 11 *institutional reshaping* strategies was 66%.

Planned Quality and Productivity Incentives

A summary of leader response frequencies and the percentage rank-ordering of *quality and productivity incentive* strategies planned for use is presented in Table 26. Population responses indicated that all eight *quality and productivity incentive* strategies will be used to some extent. Planned strategy use in this category ranged from a low of 52% ("Evaluate management for budgetary constraints related to quality") to a high of 96% ("Assess quality of academic programs"). The leadership's planned level of use of the eight *quality and productivity incentive* strategies surveyed was 84%.

Table 25
Institutional Reshaping Strategies Planned for Use

Rank	Strategy	N=48	%
1	Offer new courses based on high demand.	47	98%
2	Conduct mission-based reviews of academic areas.	45	94%
3	Evaluate institutional mission as it relates to effectiveness.	45	94%
4	Reallocate positions when they become available.	44	92%
5	Encourage development of new credit programs.	43	90%
6	Revise institutional role and mission.	26	54%
7	Reduce the scope of activities of the institution.	25	52%
8	Implement early retirement incentive programs.	24	50%
9	Reduce non-traditional programs or courses.	20	42%
10	Reduce number of faculty positions.	19	40%
11	Reduce developmental and adult basic education programs.	10	21%

Leadership's planned level of use (based on the maximum possible) of the 11 institutional reshaping strategies surveyed was 66%.

Table 26
Quality and Productivity Incentive Strategies Planned for Use

Rank	Strategy	N=48	%
1	Assess quality of academic programs.	46	96%
2	Perform cost analysis before strategy implementation.	45	94%
3	Increase reliance on technology in teaching and learning.	45	94%
4	Involve faculty in strategy suggestions for budgetary constraints.	45	94%
5	Increase reliance on technology in student services areas.	42	88%
6	Build formal partnerships with other community colleges.	37	77%
7	Encourage the use of carry-over funds.	35	73%
8	Evaluate management for budgetary constraints related to quality.	25	52%

Leadership's planned level of use (based on the maximum possible) of the 8 quality and productivity incentive strategies surveyed was 84%.

Planned Process Reengineering Strategies

A summary of leader response frequencies and the percentage rank-ordering of *process reengineering* strategies used is presented in Table 27. Population responses indicated that all three *process reengineering* strategies will be used to some extent. Planned strategy use in this category ranged from a low of 65% ("Contract out services previously provided internally") to a high of 96% ("Increase reliance on technology in administrative functions"). The leadership's planned level of use of the three *process reengineering* strategies surveyed was 84%.

Table 27
Process Reengineering Strategies Planned for Use

Rank	Strategy	N=48	%
1	Increase reliance on technology in administrative functions.	46	96%
2	Reengineer work processes.	44	92%
3	Contract out services previously provided internally.	31	65%
Leadership's planned level of use (based on the maximum possible) of the 3 process reengineering strategies surveyed was 84%.			

Planned Strategies to Build a "Quality" Culture

A summary of leader response frequencies and the percentage rank-ordering of strategies planned for use to *build a "quality" culture* is presented in Table 28. Population responses indicated that all 20 strategies to *build a "quality" culture* will be used to some extent. Planned strategy use in this

category ranged from a low of 48% ("Utilize ad hoc committee for management of budgetary constraints") to a high of 100% ("Build formal partnerships with business and industry," "Communicate with faculty regarding budget constraints," and "Communicate with staff regarding budget constraints"). The leadership's planned use of the 20 strategies surveyed to *build a "quality" culture* was 84%. The leadership's overall level of planned use of all 42 *innovative strategies* (i.e., reshaping, quality and productivity, process reengineering, and "quality" culture strategies) was 79%.

Table 28
Building a "Quality" Culture Strategies Planned for Use

Rank	Strategy	N=48	%
1	Build formal partnerships with business and industry.	48	100%
2	Communicate with faculty regarding budget constraints.	48	100%
3	Communicate with staff regarding budget constraints.	48	100%
4	Involve staff in strategy suggestions for budgetary constraints.	47	98%
5	Encourage institutional focus on the customer.	46	96%
6	Emphasize teamwork across departments.	46	96%
7	Build formal partnerships with high schools.	46	96%
8	Assess quality of support programs.	45	94%
9	Provide mechanisms for ongoing customer feedback.	43	90%
10	Communicate with general public regarding budget constraints.	42	88%
11	Build formal partnerships with four-year colleges.	41	85%
12	Maintain trends and projections for management decision making.	40	83%
13	Conduct mission-based reviews of administrative areas.	39	81%
14	Communicate with students regarding budget constraints.	39	81%
15	Conduct mission-based reviews of support areas.	39	81%
16	Utilize institutional planning committee for budgetary constraints.	34	71%
17	Implement Total Quality Management concepts.	34	71%
18	Involve students in strategy suggestions for budgetary constraints.	29	60%
19	Increase staff development.	29	60%
20	Utilize ad hoc committee for management of budgetary constraints.	23	48%
Leadership's planned level of use (based on the maximum possible) of the 20 "quality" culture strategies surveyed was 84%.			

Figure 15 summarizes the population planned utilization levels of all 80 strategies grouped by the rightsizing taxonomy. The figure shows that *cost reducing* and *institutional reshaping* strategies were planned for use least by the population with employment levels of 41% and 66%, respectively. The leadership's aversion to use these two strategy categories is consistent with the past use analysis, with planned use of *cost reducing* strategies even less than past use. The figure also shows that the level of planned use of the remaining four strategy categories hovered in the low to mid 80% range. These planned levels of use were about 10% higher than past levels of use for these categories.

Figure 15
Rightsizing Strategy Planned Use by Taxonomy

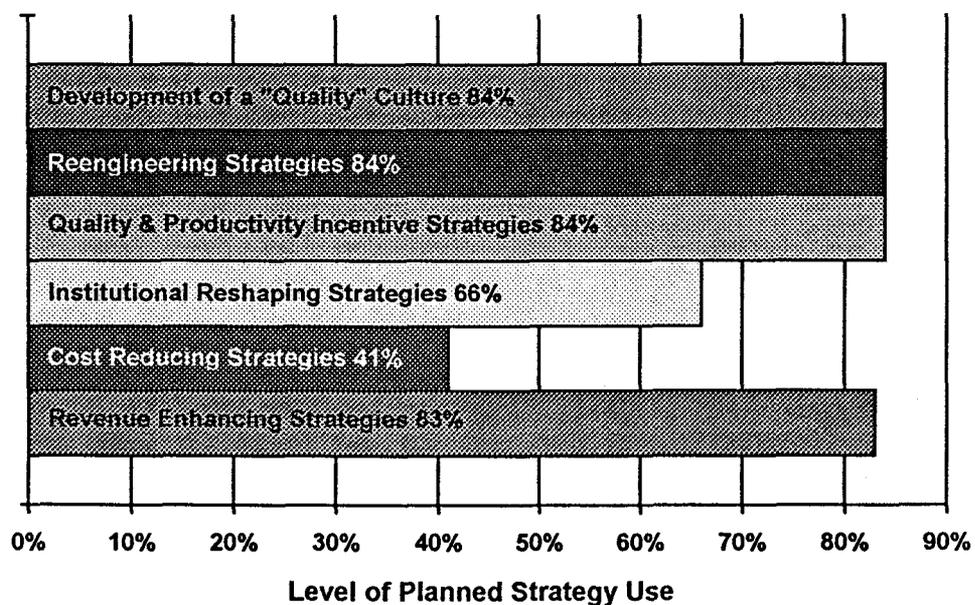


Figure 16 presents summary information on Oregon Community College planned strategy use grouped by taxonomy. The figure provides dispersion maps of frequency distributions within each taxonomy. Related statistical information used to derive the maps is also provided in the figure.

The dispersion maps indicate that “Revenue” and “Quality and Productivity” strategies have the most highly concentrated frequency of planned uses around their medians. However, this concentration is less than past use as shown in Figure 8. This implies broader planned uses of strategies in these categories. It is significant to note that the medians of all planned taxonomic classifications were trending upward from past use except for “Cost” and “Reshaping” strategies, which were trending downward from past use.

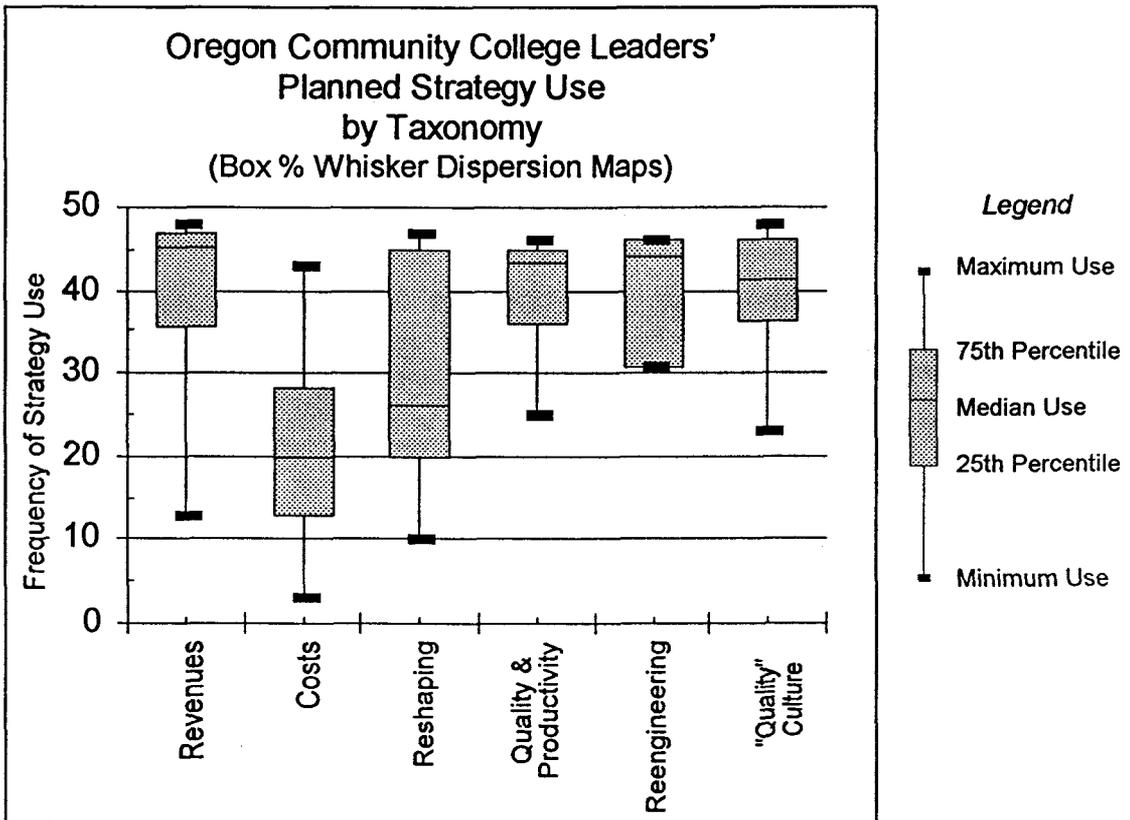
Leadership’s Planned Strategy Behavior Grouped by FTE Category

Tables 29 through 33 present information on population planned use of strategies grouped by the four Oregon community college FTE Categories. These categories are more specifically defined and identified in Table 1 and Appendix A.

Planned Strategy Use by FTE Category I

A summary of *FTE Category I* leader response frequencies and the percentage rank-ordering of the top 25 strategies planned for use is presented

Figure 16
 Summary Frequency Dispersion Maps and Statistics
 for Planned Use of Rightsizing Strategies by Taxonomy



Summary Statistics N=48	Rightsizing Taxonomy					
	Rev.	Cost	Reshap- ing	Quality & Prod.	Reeng.	Quality Culture
Number of Strategies in Taxonomy	8	30	11	8	3	20
Mean Strategy Use within Taxonomy	39.6	19.8	31.6	40.0	40.3	40.3
Standard Deviation	12.0	10.5	13.3	7.3	8.1	7.2
Maximum Strategy Use	48	43	47	46	46	48
75th Percentile of Strategy Use	47	28	45	45	46	46
Median Strategy Use	45.5	20.0	26.0	43.5	44.0	41.5
25th Percentile of Strategy Use	35.5	13	20	36	31	36.5
Minimum Strategy Use	13	3	10	25	31	23

in Table 29. *FTE Category I* leader responses indicated that not all 80 rightsizing strategies will be used. The five strategies not planned for use by *FTE Category I* leaders were (a) "Encourage sabbatical leaves without pay;" (b) "Limit institutional enrollment;" (c) "Reduce developmental and adult basic education programs;" (d) "Reduce off-campus credit programs;" and (e) "Reduce weekend programs and classes." As Table 29 indicates, eighteen strategies were planned for use by 100% of *FTE Category I* leaders. The *FTE Category I* level of planned use of the 80 strategies surveyed was 59%.

Planned Strategy Use by FTE Category II

A summary of *FTE Category II* leader response frequencies and the percentage rank-ordering of the top 25 strategies planned for use is presented in Table 30. *FTE Category II* leader responses indicated that not all 80 rightsizing strategies will be used. The two strategies not planned for use by *FTE Category II* leaders were (a) Limiting institutional enrollment and (b) Reducing off-campus credit programs. As Table 30 indicates, seven strategies were planned for use by 100% of *FTE Category II* leaders. The *FTE Category II* level of planned use of the 80 strategies surveyed was 70%.

Table 29
Top 25 Strategies Planned for Use by FTE Category I Colleges

Rank	Strategy	n=12	%
1	Assess quality of academic programs.	12	100%
2	Assess quality of support programs.	12	100%
3	Build formal partnerships with business and industry.	12	100%
4	Build formal partnerships with high schools.	12	100%
5	Communicate with faculty regarding budget constraints.	12	100%
6	Communicate with staff regarding budget constraints.	12	100%
7	Conduct mission-based reviews of academic areas.	12	100%
8	Cultivate alternative funding sources.	12	100%
9	Emphasize teamwork across departments.	12	100%
10	Encourage institutional focus on the customer.	12	100%
11	Evaluate institutional mission as it relates to effectiveness.	12	100%
12	Increase fund-raising and development efforts.	12	100%
13	Increase institutional enrollment.	12	100%
14	Increase reliance on technology in administrative functions.	12	100%
15	Increase reliance on technology in teaching and learning.	12	100%
16	Involve faculty in strategy suggestions for budgetary constraints.	12	100%
17	Involve staff in strategy suggestions for budgetary constraints.	12	100%
18	Offer new courses based on high demand.	12	100%
19	Build formal partnerships with other community colleges.	11	92%
20	Communicate with business/industry regarding budget constraints.	11	92%
21	Conduct mission-based reviews of administrative areas.	11	92%
22	Defer equipment purchases.	11	92%
23	Encourage development of new credit programs.	11	92%
24	Perform cost analysis before strategy implementation.	11	92%
25	Reengineer work processes.	11	92%
FTE Category I planned level of use (based on the maximum possible) of the 80 strategies surveyed was 59%.			

Table 30
Top 25 Strategies Planned for Use by FTE Category II Colleges

Rank	Strategy	n=12	%
1	Build formal partnerships with business and industry.	12	100%
2	Build formal partnerships with four-year colleges.	12	100%
3	Communicate with faculty regarding budget constraints.	12	100%
4	Communicate with staff regarding budget constraints.	12	100%
5	Increase fund-raising and development efforts.	12	100%
6	Increase tuition.	12	100%
7	Reallocate positions when they become available.	12	100%
8	Assess quality of support programs.	11	92%
9	Build formal partnerships with high schools.	11	92%
10	Communicate with business/industry regarding budget constraints.	11	92%
11	Communicate with general public regarding budget constraints.	11	92%
12	Conduct mission-based reviews of academic areas.	11	92%
13	Conduct mission-based reviews of administrative areas.	11	92%
14	Cultivate alternative funding sources.	11	92%
15	Emphasize teamwork across departments.	11	92%
16	Evaluate institutional mission as it relates to effectiveness.	11	92%
17	Increase institutional enrollment.	11	92%
18	Increase reliance on technology in administrative functions.	11	92%
19	Increase reliance on technology in teaching and learning.	11	92%
20	Increase student/faculty ratios.	11	92%
21	Involve faculty in strategy suggestions for budgetary constraints.	11	92%
22	Involve staff in strategy suggestions for budgetary constraints.	11	92%
23	Offer new courses based on high demand.	11	92%
24	Perform cost analysis before strategy implementation.	11	92%
25	Reduce administrative costs.	11	92%
FTE Category II planned level of use (based on the maximum possible) of the 80 strategies surveyed was 70%.			

Planned Strategy Use by FTE Category III

A summary of *FTE Category III* leader response frequencies and the percentage rank-ordering of the top 25 strategies planned for use is presented in Table 31. *FTE Category III* leader responses indicated that not all rightsizing strategies will be used. The two strategies not planned for use by *FTE Category III* leaders were (a) Limiting institutional enrollment and (b) Reducing weekend programs and classes. As Table 31 indicates, seventeen strategies were planned for use by 100% of *FTE Category III* leaders. The *FTE Category III* level of planned use of the 80 strategies surveyed was 64%.

Planned Strategy Use by FTE Category IV

A summary of *FTE Category IV* leader response frequencies and the percentage rank-ordering of the top 25 strategies planned for use is presented in Table 32. *FTE Category IV* leader responses indicated that all rightsizing strategies will be used to some extent. As Table 32 indicates, nineteen strategies were planned for use by 100% of *FTE Category IV* leaders. The *FTE Category IV* level of planned use of the 80 strategies surveyed was 67%.

Planned Strategy Use by All FTE Categories

Table 33 summarizes the strategy planned use by all four FTE categories relative to the top 25 strategies planned for use by *FTE Category IV*.

Figure 17 summarizes the overall level of strategy planned use by all FTE categories.

Table 31
Top 25 Strategies Planned for Use by FTE Category III Colleges

Rank	Strategy	n=12	%
1	Assess quality of academic programs.	12	100%
2	Build formal partnerships with business and industry.	12	100%
3	Build formal partnerships with four-year colleges.	12	100%
4	Build formal partnerships with high schools.	12	100%
5	Communicate with faculty regarding budget constraints.	12	100%
6	Communicate with staff regarding budget constraints.	12	100%
7	Cultivate alternative funding sources.	12	100%
8	Encourage institutional focus on the customer.	12	100%
9	Increase fund-raising and development efforts.	12	100%
10	Increase institutional enrollment.	12	100%
11	Increase tuition.	12	100%
12	Involve staff in strategy suggestions for budgetary constraints.	12	100%
13	Offer new courses based on high demand.	12	100%
14	Perform cost analysis before strategy implementation.	12	100%
15	Provide mechanisms for ongoing customer feedback.	12	100%
16	Reduce administrative costs.	12	100%
17	Reengineer work processes.	12	100%
18	Assess quality of support programs.	11	92%
19	Communicate with business/industry regarding budget constraints.	11	92%
20	Emphasize teamwork across departments.	11	92%
21	Encourage development of new credit programs.	11	92%
22	Encourage the use of carry-over funds.	11	92%
23	Evaluate institutional mission as it relates to effectiveness.	11	92%
24	Increase reliance on technology in administrative functions.	11	92%
25	Increase reliance on technology in student services areas.	11	92%
FTE Category III planned level of use (based on the maximum possible) of the 80 strategies surveyed was 64%.			

Table 32
Top 25 Strategies Planned for Use by FTE Category IV Colleges

Rank	Strategy	n=12	%
1	Assess quality of academic programs.	12	100%
2	Build formal partnerships with business and industry.	12	100%
3	Communicate with business/industry regarding budget constraints.	12	100%
4	Communicate with faculty regarding budget constraints.	12	100%
5	Communicate with staff regarding budget constraints.	12	100%
6	Conduct mission-based reviews of academic areas.	12	100%
7	Cultivate alternative funding sources.	12	100%
8	Emphasize teamwork across departments.	12	100%
9	Encourage institutional focus on the customer.	12	100%
10	Increase fund-raising and development efforts.	12	100%
11	Increase institutional enrollment.	12	100%
12	Increase reliance on technology in administrative functions.	12	100%
13	Increase reliance on technology in student services areas.	12	100%
14	Increase tuition.	12	100%
15	Involve faculty in strategy suggestions for budgetary constraints.	12	100%
16	Involve staff in strategy suggestions for budgetary constraints.	12	100%
17	Offer new courses based on high demand.	12	100%
18	Reallocate positions when they become available.	12	100%
19	Reduce administrative costs.	12	100%
20	Assess quality of support programs.	11	92%
21	Build formal partnerships with four-year colleges.	11	92%
22	Build formal partnerships with high schools.	11	92%
23	Communicate with general public regarding budget constraints.	11	92%
24	Conduct mission-based reviews of support areas.	11	92%
25	Encourage development of new credit programs.	11	92%
FTE Category IV planned level of use (based on the maximum possible) of the 80 strategies surveyed was 67%.			

Table 33
 Top 25 Strategies Planned for Use by FTE Category IV Colleges
 with Related Strategy Use by FTE Categories I, II, and III

	Strategy	FTE Categories			
		I	II	III	IV
		<1500 n=12	1500- 2499 n=12	2500- 5499 n=12	5500≥ n=12
1	Assess quality of academic programs.	100%	83%	100%	100%
2	Build formal partnerships with business and industry.	100%	100%	100%	100%
3	Communicate with business/industry regarding budget	92%	92%	92%	100%
4	Communicate with faculty regarding budget constraints.	100%	100%	100%	100%
5	Communicate with staff regarding budget constraints.	100%	100%	100%	100%
6	Conduct mission-based reviews of academic areas.	100%	92%	83%	100%
7	Cultivate alternative funding sources.	100%	92%	100%	100%
8	Emphasize teamwork across departments.	100%	92%	92%	100%
9	Encourage institutional focus on the customer.	100%	83%	100%	100%
10	Increase fund-raising and development efforts.	100%	100%	100%	100%
11	Increase institutional enrollment.	100%	92%	100%	100%
12	Increase reliance on technology in admin. functions.	100%	92%	92%	100%
13	Increase reliance on technology in student services.	83%	75%	92%	100%
14	Increase tuition.	83%	100%	100%	100%
15	Involve faculty in suggestions for budgetary constraints.	100%	92%	83%	100%
16	Involve staff in strategy suggestions for budgetary	100%	92%	100%	100%
17	Offer new courses based on high demand.	100%	92%	100%	100%
18	Reallocate positions when they become available.	75%	100%	92%	100%
19	Reduce administrative costs.	67%	92%	100%	100%
20	Assess quality of support programs.	100%	92%	92%	92%
21	Build formal partnerships with four-year colleges.	50%	100%	100%	92%
22	Build formal partnerships with high schools.	100%	92%	100%	92%
23	Communicate with general public regarding constraints.	83%	92%	83%	92%
24	Conduct mission-based reviews of support areas.	83%	83%	67%	92%
25	Encourage development of new credit programs.	92%	83%	92%	92%

Figure 17
Rightsizing Strategy Planned Use by All College FTE Categories

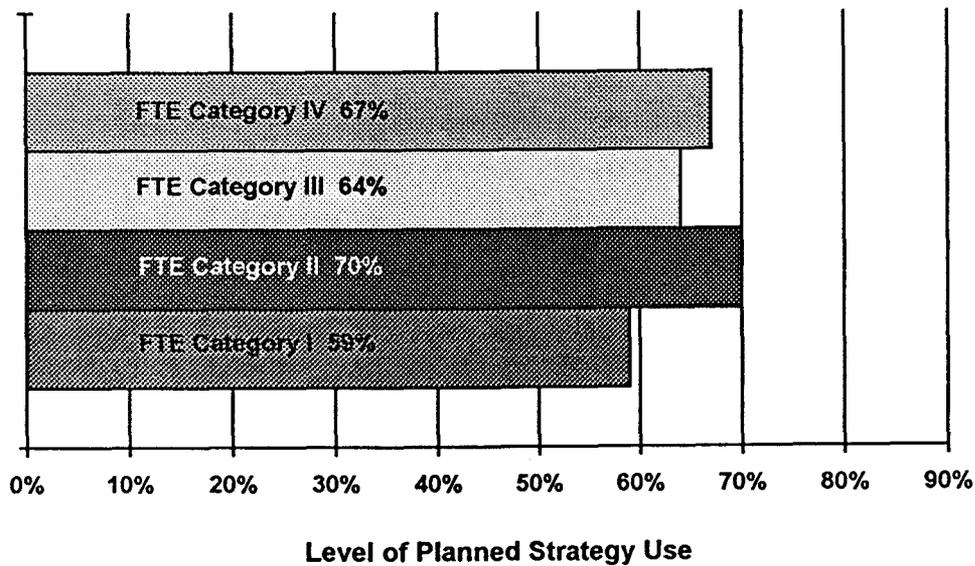
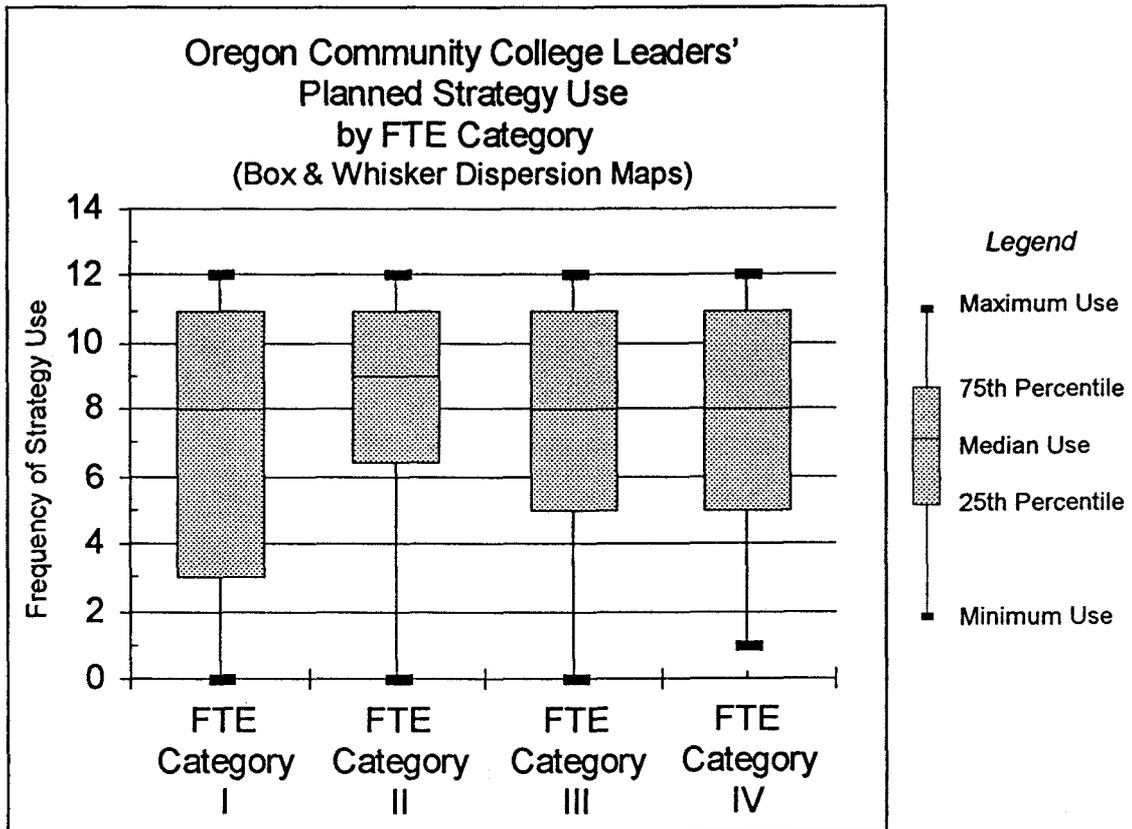


Figure 18 presents summary information on planned strategy use grouped by FTE Category. The figure provides dispersion maps of frequency distributions within each category. Related statistical information is also provided in the figure. Comparing the information in Figure 18 with that in Figure 10 indicates that smaller FTE Categories I and II were planning to increase the breadth of strategy use in the future. This comparison also shows that planned strategy medians are increasing for the two smaller FTE Categories I and II and decreasing for the two larger FTE Categories III and IV. A Chi Square Test of Independence could not reject the null hypothesis (H_0) at the .05 level of significance that planned rightsizing strategy use and the grouping of strategies by FTE Categories were independent. Accordingly, it cannot be said the samples represent different underlying populations.

Figure 18
 Summary Frequency Dispersion Maps and Statistics
 for Planned Use of Rightsizing Strategies by FTE Category



Summary Statistics	FTE Category			
	I n=12	II n=12	III n=12	IV n=12
Number of Strategies in Survey	80	80	80	80
Mean Strategy Use by Category	7.1	8.3	7.7	8.1
Standard Deviation	4.2	3.3	3.7	3.5
Maximum Strategy Use by Category	12	12	12	12
75th Percentile of Strategy Use by Category	11	11	11	11
Median Strategy Use by Category	8	9	8	8
25th Percentile of Strategy Use by Category	3	6.5	5	5
Minimum Strategy Use by Category	0	0	0	1

Leadership's Planned Strategy Behavior Grouped by Leadership Area

In this section, planned strategy use information is presented by leadership area. Tables 34 through 37 present the information broken out by the three leadership areas of instructional services, college services, and student services.

Planned Strategy Use by Instructional Deans

A summary of the 16 *Instructional Dean* response frequencies and the percentage rank-ordering of the top 25 strategies planned for use is presented in Table 34. *Instructional Dean* responses indicated that all 80 rightsizing strategies will be used to some extent. As Table 34 indicates, sixteen strategies will be used by 100% of college *Instructional Deans*. The planned *Instructional Dean* level of use of the 80 strategies surveyed was 68%.

Planned Strategy Use by Business Officers

A summary of the 16 *Business Officer* response frequencies and the percentage rank-ordering of the top 25 strategies planned for use is presented in Table 35. *Business Officer* responses indicated that all rightsizing strategies will be used to some extent. As Table 35 indicates, twenty-two strategies will be used by 100% of *Business Officers*. The planned *Business Officer* level of use of the 80 strategies surveyed was 65%.

Table 34
Top 25 Strategies Planned for Use by Instructional Deans

Rank	Strategy	n=16	%
1	Build formal partnerships with business and industry.	16	100%
2	Build formal partnerships with high schools.	16	100%
3	Communicate with business/industry regarding budget constraints.	16	100%
4	Communicate with faculty regarding budget constraints.	16	100%
5	Communicate with general public regarding budget constraints.	16	100%
6	Communicate with staff regarding budget constraints.	16	100%
7	Conduct enrollment management studies.	16	100%
8	Cultivate alternative funding sources.	16	100%
9	Emphasize teamwork across departments.	16	100%
10	Increase fund-raising and development efforts.	16	100%
11	Increase institutional enrollment.	16	100%
12	Involve faculty in strategy suggestions for budgetary constraints.	16	100%
13	Involve staff in strategy suggestions for budgetary constraints.	16	100%
14	Offer new courses based on high demand.	16	100%
15	Perform cost analysis before strategy implementation.	16	100%
16	Reallocate positions when they become available.	16	100%
17	Assess quality of academic programs.	15	94%
18	Assess quality of support programs.	15	94%
19	Build formal partnerships with other community colleges.	15	94%
20	Conduct mission-based reviews of academic areas.	15	94%
21	Encourage institutional focus on the customer.	15	94%
22	Evaluate institutional mission as it relates to effectiveness.	15	94%
23	Increase reliance on technology in administrative functions.	15	94%
24	Increase tuition.	15	94%
25	Provide mechanisms for ongoing customer feedback.	15	94%
Instructional Dean planned level of use (based on the maximum possible) of the 80 strategies surveyed was 68%.			

Table 35
Top 25 Strategies Planned for Use by Business Officers

Rank	Strategy	n=16	%
1	Assess quality of academic programs.	16	100%
2	Assess quality of support programs.	16	100%
3	Build formal partnerships with business and industry.	16	100%
4	Build formal partnerships with high schools.	16	100%
5	Communicate with faculty regarding budget constraints.	16	100%
6	Communicate with staff regarding budget constraints.	16	100%
7	Conduct mission-based reviews of academic areas.	16	100%
8	Cultivate alternative funding sources.	16	100%
9	Encourage institutional focus on the customer.	16	100%
10	Evaluate institutional mission as it relates to effectiveness.	16	100%
11	Increase fund-raising and development efforts.	16	100%
12	Increase institutional enrollment.	16	100%
13	Increase reliance on technology in administrative functions.	16	100%
14	Increase reliance on technology in student services areas.	16	100%
15	Increase reliance on technology in teaching and learning.	16	100%
16	Increase tuition.	16	100%
17	Involve staff in strategy suggestions for budgetary constraints.	16	100%
18	Maintain trends and projections for management decision making.	16	100%
19	Offer new courses based on high demand.	16	100%
20	Perform cost analysis before strategy implementation.	16	100%
21	Provide mechanisms for ongoing customer feedback.	16	100%
22	Reduce administrative costs.	16	100%
23	Communicate with business/industry regarding budget constraints.	15	94%
24	Conduct mission-based reviews of administrative areas.	15	94%
25	Emphasize teamwork across departments.	15	94%

Business Officer planned level of use (based on the maximum possible) of the 80 strategies surveyed was 65%.

Planned Strategy Use by Deans of Students

Table 36 presents a summary of the 16 *Deans of Students* response frequencies and the percentage rank-ordering of the top 25 strategies planned for use. *Deans of Students* responses indicated that all rightsizing strategies will be used to some extent. As Table 36 indicates, four strategies will be used

by 100% of *Deans of Students*. The planned level of use by *Deans of Students* of the 80 strategies surveyed was 63%.

Table 36
Top 25 Strategies Planned for Use by Deans of Students

Rank	Strategy	n=16	%
1	Build formal partnerships with business and industry.	16	100%
2	Communicate with faculty regarding budget constraints.	16	100%
3	Communicate with staff regarding budget constraints.	16	100%
4	Increase fund-raising and development efforts.	16	100%
5	Assess quality of academic programs.	15	94%
6	Cultivate alternative funding sources.	15	94%
7	Emphasize teamwork across departments.	15	94%
8	Encourage development of new credit programs.	15	94%
9	Encourage institutional focus on the customer.	15	94%
10	Increase institutional enrollment.	15	94%
11	Increase reliance on technology in administrative functions.	15	94%
12	Increase reliance on technology in teaching and learning.	15	94%
13	Increase tuition.	15	94%
14	Involve faculty in strategy suggestions for budgetary constraints.	15	94%
15	Involve staff in strategy suggestions for budgetary constraints.	15	94%
16	Offer new courses based on high demand.	15	94%
17	Reengineer work processes.	15	94%
18	Assess quality of support programs.	14	88%
19	Build formal partnerships with four-year colleges.	14	88%
20	Build formal partnerships with high schools.	14	88%
21	Communicate with business/industry regarding budget constraints.	14	88%
22	Communicate with general public regarding budget constraints.	14	88%
23	Conduct mission-based reviews of academic areas.	14	88%
24	Evaluate institutional mission as it relates to effectiveness.	14	88%
25	Increase reliance on technology in student services areas.	14	88%
Deans of Students planned level of use (based on the maximum possible) of the 80 strategies surveyed was 63%.			

Planned Strategy Use by All Leadership Areas

Table 37 summarizes all leadership area strategies planned for use relative to the top 25 strategies for *Instructional Deans*. Figure 19 summarizes the strategy level planned by all leadership areas.

Table 37
Top 25 Strategies Planned for Use by Instructional Deans
with Relative Plans by Business Officers and Deans of Students

Strategy	Operational Leadership Categories		
	Deans of Stdts. n=16	Bus. Mgrs. n=16	Deans of Inst. n=16
Build formal partnerships with business and industry.	100%	100%	100%
Build formal partnerships with high schools.	88%	100%	100%
Communicate with business/industry regarding budget	88%	94%	100%
Communicate with faculty regarding budget constraints.	100%	100%	100%
Communicate with general public regarding budget constraints.	88%	75%	100%
Communicate with staff regarding budget constraints.	100%	100%	100%
Conduct enrollment management studies.	81%	63%	100%
Cultivate alternative funding sources.	94%	100%	100%
Emphasize teamwork across departments.	94%	94%	100%
Increase fund-raising and development efforts.	100%	100%	100%
Increase institutional enrollment.	94%	100%	100%
Involve faculty in strategy suggestions for budgetary	94%	88%	100%
Involve staff in strategy suggestions for budgetary constraints.	94%	100%	100%
Offer new courses based on high demand.	94%	100%	100%
Perform cost analysis before strategy implementation.	81%	100%	100%
Reallocate positions when they become available.	88%	88%	100%
Assess quality of academic programs.	94%	100%	94%
Assess quality of support programs.	88%	100%	94%
Build formal partnerships with other community colleges.	56%	81%	94%
Conduct mission-based reviews of academic areas.	88%	100%	94%
Encourage institutional focus on the customer.	94%	100%	94%
Evaluate institutional mission as it relates to effectiveness.	88%	100%	94%
Increase reliance on technology in administrative functions.	94%	100%	94%
Increase tuition.	94%	100%	94%
Provide mechanisms for ongoing customer feedback.	75%	100%	94%

Figure 19
College Leadership Area Strategy Planned Use Level

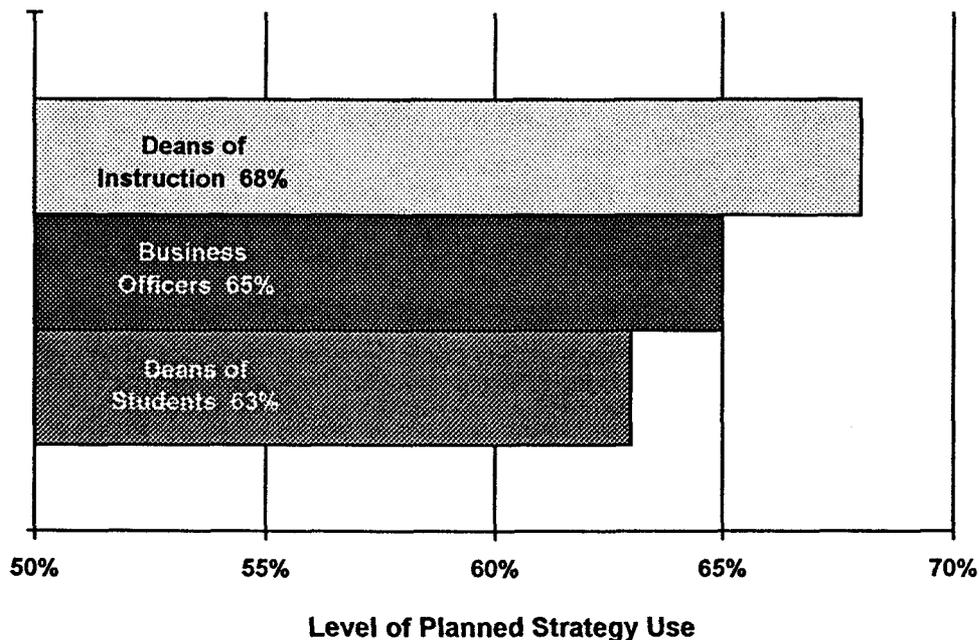
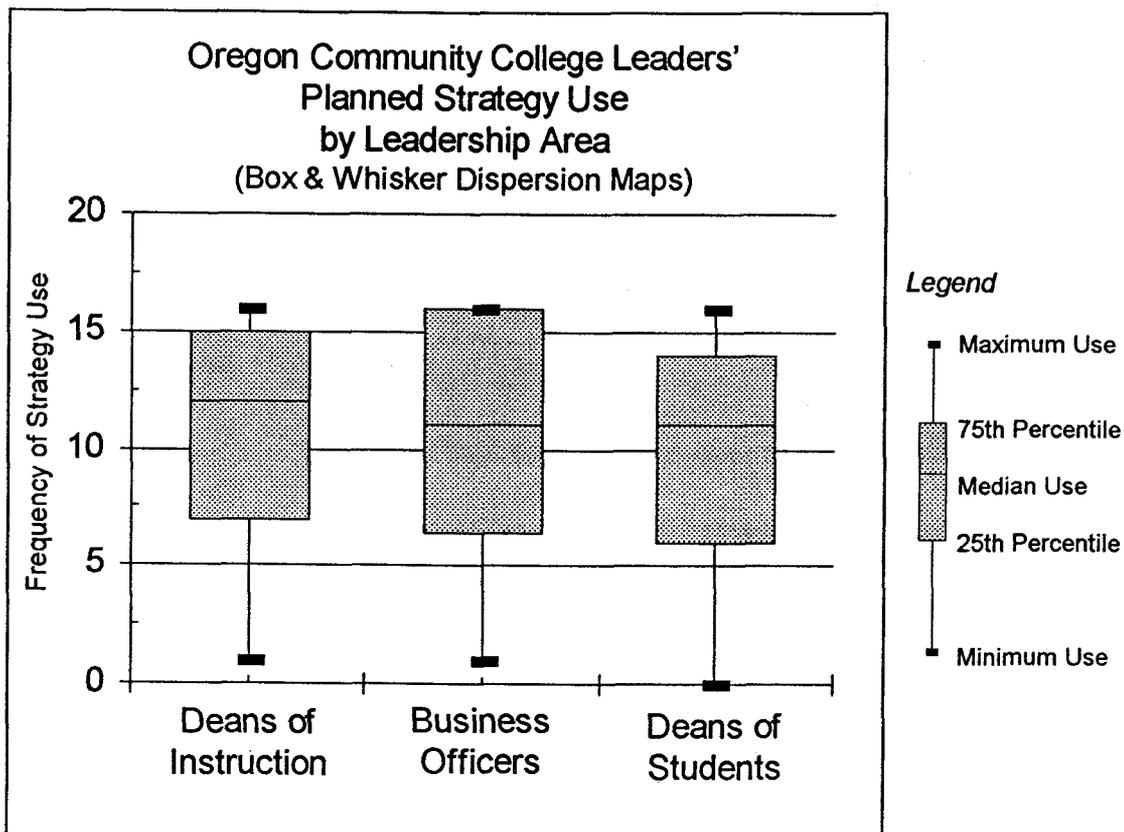


Figure 20 presents summary information on leaders' past strategy use grouped by leadership area. The figure provides dispersion maps of frequency distributions within each area. Related statistical information is also provided in the figure. Similar to past use data in Figure 12, the dispersion maps indicate that distributions within the three areas are very similar. The most noticeable difference between past and planned leadership area data was that planned use appeared to be somewhat broader. This is also indicated by the increased standard deviations in planned use. The results of a Chi Square Test of Independence could not reject the null hypothesis (H_0) at the .05 level of significance that past rightsizing strategy use and the grouping of strategies by leadership area were independent.

Figure 20
 Summary Frequency Dispersion Maps and Statistics
 for Planned Use of Rightsizing Strategies by Leadership Area



Summary Statistics	Leadership Area		
	Deans of Instruction n=16	Business Officers n=16	Deans of Students n=16
Number of Strategies Surveyed	80	80	80
Mean Planned Use of Strategies by Leaders	10.8	10.5	10.0
Standard Deviation	4.7	4.8	4.5
Maximum Strategy Planned Use by Leaders	16	16	16
75th Percentile of Strategy Use	15	16	14
Median Strategy Planned Use by Leaders	12	11	11
25th Percentile of Strategy Use	7	6.5	6
Minimum Strategy Planned Use by Taxonomy	1	1	0

Leadership's Planned Strategy Behavior
Grouped by "Equity" and "Floored" Status

Tables 38 through 40 present information on how leaders representing "Equity" and "Floored" colleges responded to the planned use of strategies. A summary of responses from the 27 leaders representing *"Equity" Colleges* is presented in Table 38. Both response frequencies and a percentage rank-ordering of the top 25 strategies planned for use are reported in the table. Responses by *"Equity" College* leaders indicated that all rightsizing strategies will be used to some extent. Strategy planned use ranged from a low of 4% to a high of 100%. As the table indicates, eleven strategies are planned for use by 100% of *"Equity" College* leaders. The *"Equity" College* leaders' planned level of use of the 80 strategies surveyed was 64%.

A summary of responses from the 21 leaders representing *"Floored" Colleges* is presented in Table 39. Both response frequencies and a percentage rank-ordering of the top 25 strategies planned for use are reported in the table. Responses by the *"Floored" College* leaders indicated that all rightsizing strategies will be used to some extent. As the table indicates, seven strategies will be used by 100% of *"Floored" College* leaders. The *"Floored" College* leaders' planned level of use of the 80 strategies surveyed was 67%.

Table 38
 Top 25 Strategies Planned for Use by "Equity" Colleges

Rank	Strategy	n=27	%
1	Assess quality of academic programs.	27	100%
2	Build formal partnerships with business and industry.	27	100%
3	Communicate with faculty regarding budget constraints.	27	100%
4	Communicate with staff regarding budget constraints.	27	100%
5	Conduct mission-based reviews of academic areas.	27	100%
6	Cultivate alternative funding sources.	27	100%
7	Encourage institutional focus on the customer.	27	100%
8	Increase fund-raising and development efforts.	27	100%
9	Increase institutional enrollment.	27	100%
10	Involve staff in strategy suggestions for budgetary constraints.	27	100%
11	Offer new courses based on high demand.	27	100%
12	Assess quality of support programs.	26	96%
13	Build formal partnerships with high schools.	26	96%
14	Emphasize teamwork across departments.	26	96%
15	Evaluate institutional mission as it relates to effectiveness.	26	96%
16	Increase reliance on technology in administrative functions.	26	96%
17	Communicate with business/industry regarding budget constraints.	25	93%
18	Communicate with general public regarding budget constraints.	25	93%
19	Increase reliance on technology in teaching and learning.	25	93%
20	Increase tuition.	25	93%
21	Involve faculty in strategy suggestions for budgetary constraints.	25	93%
22	Perform cost analysis before strategy implementation.	25	93%
23	Provide mechanisms for ongoing customer feedback.	25	93%
24	Reduce administrative costs.	25	93%
25	Build formal partnerships with other community colleges.	24	89%

"Equity" College planned level of use (based on the maximum possible) of the 80 strategies surveyed was 64%.

Table 39
Top 25 Strategies Planned for Use by "Floored" Colleges

Rank	Strategy	n=21	%
1	Build formal partnerships with business and industry.	21	100%
2	Build formal partnerships with four-year colleges.	21	100%
3	Communicate with faculty regarding budget constraints.	21	100%
4	Communicate with staff regarding budget constraints.	21	100%
5	Increase fund-raising and development efforts.	21	100%
6	Increase tuition.	21	100%
7	Reallocate positions when they become available.	21	100%
8	Build formal partnerships with high schools.	20	95%
9	Communicate with business/industry regarding budget constraints.	20	95%
10	Cultivate alternative funding sources.	20	95%
11	Emphasize teamwork across departments.	20	95%
12	Increase institutional enrollment.	20	95%
13	Increase reliance on technology in administrative functions.	20	95%
14	Increase reliance on technology in teaching and learning.	20	95%
15	Involve faculty in strategy suggestions for budgetary constraints.	20	95%
16	Involve staff in strategy suggestions for budgetary constraints.	20	95%
17	Offer new courses based on high demand.	20	95%
18	Perform cost analysis before strategy implementation.	20	95%
19	Reduce positions through attrition.	20	95%
20	Reengineer work processes.	20	95%
21	Assess quality of academic programs.	19	90%
22	Assess quality of support programs.	19	90%
23	Encourage development of new credit programs.	19	90%
24	Encourage institutional focus on the customer.	19	90%
25	Evaluate institutional mission as it relates to effectiveness.	19	90%

"Floored" College planned level of use (based on the maximum possible) of the 80 strategies surveyed was 67%.

Table 40 summarizes all 80 strategy uses relative to the top 25 strategies planned for use by "Equity" Colleges. Figure 21 summarizes the overall planned level of strategy use by both "Equity" Colleges and "Floored" Colleges.

Table 40
 Top 25 Strategies Planned for Use by "Equity" Colleges
 with Relative Strategy Plans for "Floored" Colleges

Rank	Strategy	"Floored" n=21	"Equity" n=27
1	Assess quality of academic programs.	90%	100%
2	Build formal partnerships with business and industry.	100%	100%
3	Communicate with faculty regarding budget constraints.	100%	100%
4	Communicate with staff regarding budget constraints.	100%	100%
5	Conduct mission-based reviews of academic areas.	86%	100%
6	Cultivate alternative funding sources.	95%	100%
7	Encourage institutional focus on the customer.	90%	100%
8	Increase fund-raising and development efforts.	100%	100%
9	Increase institutional enrollment.	95%	100%
10	Involve staff in strategy suggestions for budgetary constraints.	95%	100%
11	Offer new courses based on high demand.	95%	100%
12	Assess quality of support programs.	90%	96%
13	Build formal partnerships with high schools.	95%	96%
14	Emphasize teamwork across departments.	95%	96%
15	Evaluate institutional mission as it relates to effectiveness.	90%	96%
16	Increase reliance on technology in administrative functions.	95%	96%
17	Communicate with bus/ind regarding budget constraints.	95%	93%
18	Communicate with general public regarding budget constraints.	81%	93%
19	Increase reliance on technology in teaching and learning.	95%	93%
20	Increase tuition.	100%	93%
21	Involve faculty in strategy suggestions for budgetary constraints.	95%	93%
22	Perform cost analysis before strategy implementation.	95%	93%
23	Provide mechanisms for ongoing customer feedback.	86%	93%
24	Reduce administrative costs.	86%	93%
25	Build formal partnerships with other community colleges.	62%	89%

Figure 21
Rightsizing Strategy Planned Use by "Equity"
and "Floored" Status Categories

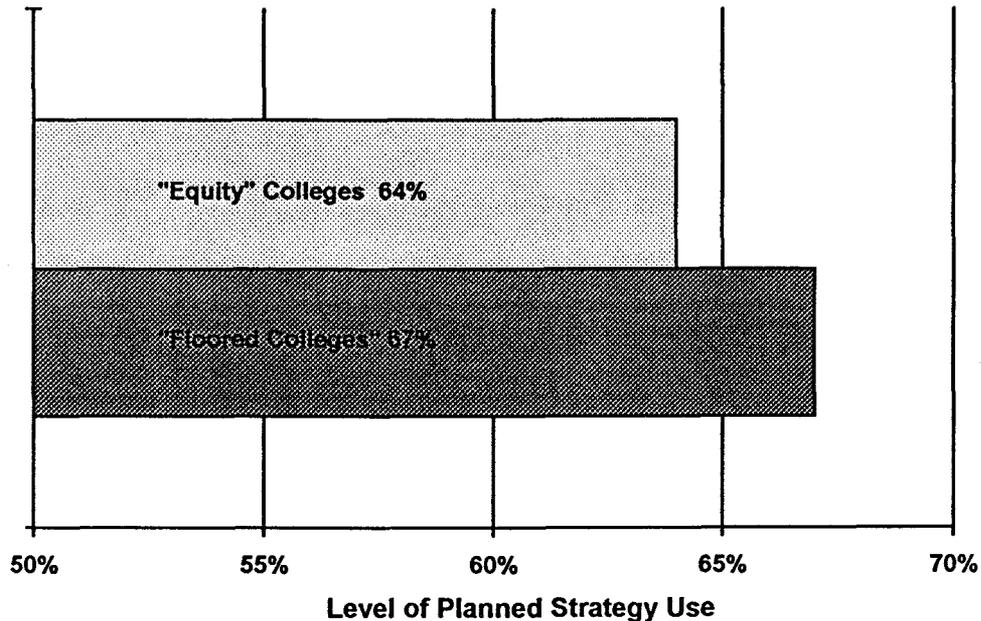
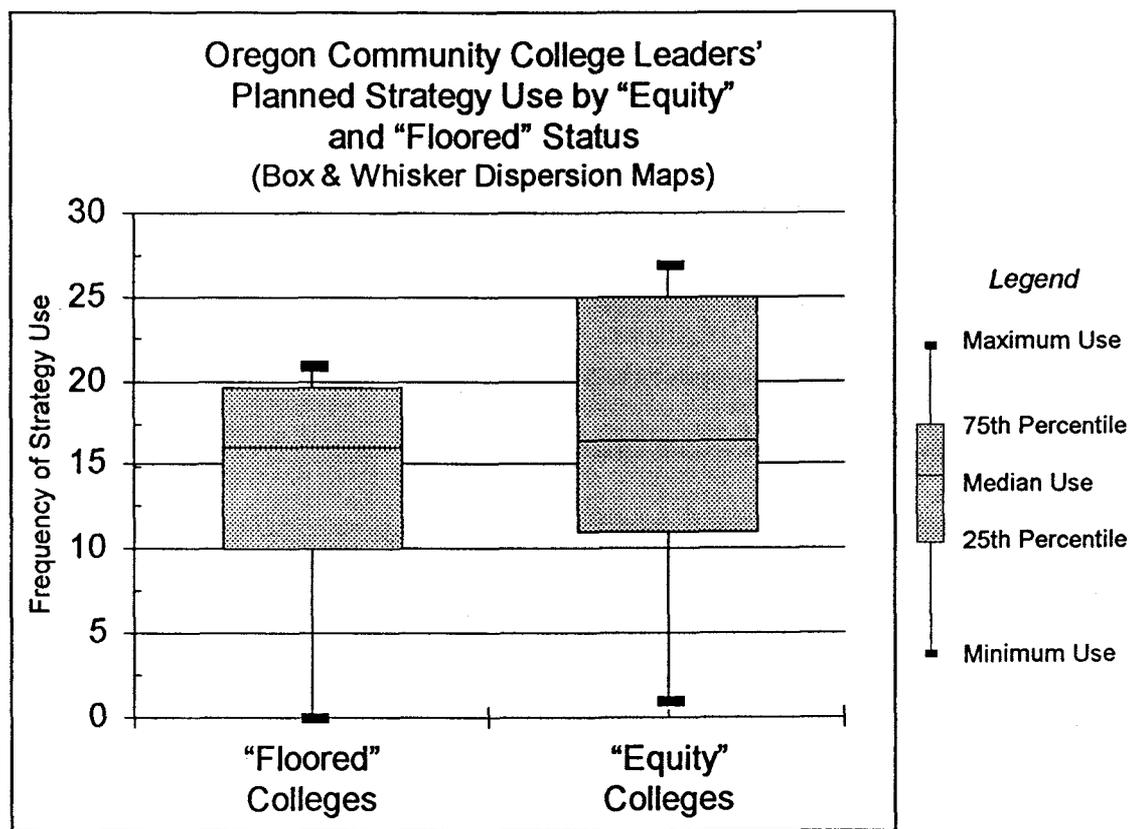


Figure 22 presents summary information on planned strategy use grouped by "Equity" and "Floored" colleges. The figure provides frequency dispersion maps of strategy use for each college classification. Related statistical information is also presented in the figure. Figure 22 indicates that college groups planned to broaden use of strategies over past use (shown in Figure 14). This broadening of strategy use resulted in "Floored" colleges having a higher planned median use over past median use. The results of a Chi Square Test of Independence could not reject the null hypothesis (H_0) at the .05 level of significance that past rightsizing strategy use and the grouping of strategies by "Floored" and "Equity" status were independent.

Figure 22
 Summary Frequency Dispersion Maps and Statistics for Planned Use of
 Rightsizing Strategies by "Equity" and "Floored" Colleges



Summary Statistics	College Status	
	"Floored" n=21	"Equity" n=27
Number of Strategies in Survey	80	80
Mean Strategy Planned Use by College Status Category	14.1	17.2
Standard Deviation	6.0	7.9
Maximum Frequency of Strategy Use	21	27
75th Percentile of Strategy Use	19.5	25
Median of Strategy Use	16	16.5
25th Percentile of Strategy Use	10	11
Minimum Frequency of Strategy Use	0	1

Research Question 3

How do Oregon's community college leaders rate rightsizing options in terms of the strategys' impact on educational access?

Summary of Significant Findings for Question 3

- (a) Strategies to *increase enrollment and fundraising efforts* were rated highly as facilitating student educational access (see Table 42).
- (b) Strategies to *reduce faculty, reduce staffing in student services, and reduce funding for student services* were rated highly as impairing student educational access (see Table 43).
- (c) Strategies to *increase tuition and increase student fees* were rated highly as impairing student educational access (see Table 43).

Detailed Data Presentation and Analysis

Research Question 3 was addressed through responses gathered in Phase II of data collection. In Phase II a panel of six Oregon community college leaders was assembled from those who had participated in Phase I. The charge of these panelists was to evaluate each of the 80 rightsizing strategies as to its perceived impact on educational access. The impact rating measurement in Phase II followed a Likert-type five point scaling, ranging from "Substantial direct negative impact on access" to "Substantial direct positive

impact on access.” The middle point indicated “No or minor impact on access.” The complete Phase II instrument is provided in Appendix B.

Once Phase II data were collected, an “Access Index” was derived for each of the 80 strategies. Table 41 presents an example of the derivation of the index for two of the 80 rightsizing strategies surveyed.

Table 41
Derivation of “Access Indices” for Two Example Strategies

Example Strategies	Access Index	Arbitrary Access Impact Weighting Schema					Phase II Panel Access Ratings of Strategies in Percentage of Frequency Scores* (A_{scores})				
	$(\sum Wt_{scores})$	$(Wt_{scores} = A_{scores} \times Wt)$									
	%	-1.0	-0.5	0.0	+0.5	+1.0	--	-	0	+	++
Cultivate Revs.	50%	0%	-8%	0%	25%	33%	0%	17%	0%	50%	33%
Increase Tuition.	-91%	-83%	-8%	0%	0%	0%	83%	17%	0%	0%	0%

*Note. Specific access rating choices for each strategy were a) “Substantial Direct Negative Impact on Access” (--); b) “Moderate Direct Negative Impact on Access” (-); c) “No or Minor Direct Impact on Access” (0); c) “Moderate Direct Positive Impact on Access” (+); and d) “Substantial Direct Positive Impact on Access” (++) . See Appendix B for complete Phase II rating instrument.

As the table shows, calculation of the Access Index begins with the impact rating scores from the panelists as percentages. These Access Scores (“ A_{scores} ”) are then weighted using an arbitrary weighting schema to derive Weighted Scores (“ Wt_{scores} ”). The sum of Weighted Scores results in an Access Index for each strategy. Finally, this Access Index provided composite

access indicators to compare against leaderships' past and planned behavior data collected in Phase I.

The top 25 rightsizing strategies rated by Oregon community college leaders as having a *positive Impact* (per Access Index) on educational access are provided in Table 42. Oregon community college leaders perceived these strategies as promoting student access. As the table shows, strategies to "Increase institutional enrollment," "Increase fund-raising and development efforts," and "Emphasize teamwork across departments" were perceived by leaders as having the greatest *positive impact* on educational access. These strategies had Access Indices of, respectively, 83%, 67%, and 67%. The mean Access Index for all 46 rightsizing strategies with a *positive impact* rating was 35.9%

The top 25 rightsizing strategies rated by Oregon community college leaders as having a *negative Impact* (per Access Index) on educational access are provided in Table 43. Oregon community college leaders perceive these strategies as impairing student access. As the table shows, strategies to "Increase tuition," "Reduce number of faculty positions," and "Reduce funding for student services" were perceived by leaders as having the greatest *negative impact* on educational access. These strategies had Access Indices of, respectively, -92%, -83%, and -67%.

Table 42
 Top 25 Rightsizing Strategies Rated by Leaders
 as Having a Positive Impact on Educational Access.

Rank	Strategy	Access Index
1	Increase institutional enrollment.	83%
2	Emphasize teamwork across departments.	67%
3	Increase fund-raising and development efforts.	67%
4	Build formal partnerships with high schools.	58%
5	Offer new courses based on high demand.	58%
6	Build formal partnerships with four-year colleges.	50%
7	Build formal partnerships with other community colleges.	50%
8	Cultivate alternative funding sources.	50%
9	Encourage development of new credit programs.	50%
10	Implement Total Quality Management concepts.	50%
11	Increase reliance on technology in teaching and learning.	50%
12	Conduct enrollment management studies.	42%
13	Involve students in strategy suggestions for budgetary constraints.	42%
14	Assess quality of academic programs.	42%
15	Assess quality of support programs.	42%
16	Communicate with faculty regarding budget constraints.	42%
17	Encourage institutional focus on the customer.	42%
18	Encourage the use of carry-over funds.	42%
19	Involve faculty in strategy suggestions for budgetary constraints.	42%
20	Maintain trends and projections for management decision making.	42%
21	Build formal partnerships with business and industry.	33%
22	Involve staff in strategy suggestions for budgetary constraints.	33%
23	Communicate with general public regarding budget constraints.	33%
24	Conduct mission-based reviews of administrative areas.	33%
25	Conduct mission-based reviews of support areas.	33%
Mean Access Index for all 46 positive impact strategies =		35.9%

The mean Access Index for all 32 rightsizing strategies with *negative impact* ratings was -41.9%. Two strategies resulted in a zero Access Index. They were (a) "Increase reliance on technology in student service areas" and (b) "Contract out services previously provided internally." Access Indices of zero suggested that these strategies were perceived as having no or only

minor affect on student access. The mean Access Index for *all rightsizing strategies* was 3.9%, suggesting a slightly positive skew.

Table 43
Top 25 Rightsizing Strategies Rated by Leaders
as Having a Negative Impact on Educational Access

Rank	Strategy	Access Index
1	Increase tuition.	-92%
2	Reduce number of faculty positions.	-83%
3	Reduce funding for student services.	-67%
4	Reduce staffing in student services.	-67%
5	Increase student fees.	-58%
6	Reduce library hours.	-58%
7	Reduce summer school expenditures.	-58%
8	Initiate across-the-board cuts.	-58%
9	Reduce non-traditional programs or courses.	-58%
10	Defer equipment purchases.	-50%
11	Limit institutional enrollment.	-50%
12	Reduce funding for library.	-50%
13	Reduce number of part-time positions.	-50%
14	Reduce off-campus credit programs.	-50%
15	Reduce positions through layoffs.	-42%
16	Reduce staffing in library services.	-42%
17	Reduce weekend programs and classes.	-42%
18	Defer facility and equipment maintenance.	-33%
19	Initiate a hiring freeze.	-33%
20	Initiate or increase parking fees.	-33%
21	Reduce developmental and adult basic education programs.	-33%
22	Reduce funds for professional development.	-33%
23	Reduce number of support staff positions.	-33%
24	Limit enrollment in certain programs.	-25%
25	Reduce funds for telephone expenditures.	-25%
	Mean Access Index for all 32 negative impact strategies =	-41.9%

Table 44 presents summary statistics for strategy access data collected in Phase II of the study.

Table 44
Summary Statistics for Rightsizing Strategy Access Index Ratings

Summary Statistics	Rightsizing Strategies		
	"Positive" Access	"Negative " Access	Total*
Number of Strategies in Category	46	32	80
Mean Access Index Rating	35.9%	-41.9%	3.9%
Standard Deviation	16.2	20.4	41.9
Maximum Access Index Rating	83.3%	-8.3%	83.3%
75th Percentile of Access Index Ratings	41.7%	-25%	37.5%
Median Access Index Rating	33.3%	-41.7%	16.7%
25th Percentile of Access Index Ratings	25%	-58.3%	-33.3%
Minimum Strategy Access Index Rating	8.3%	-91.7%	-91.7%

*Note. Total included 2 strategies having an "Access Index" of zero, not indicating a positive or negative impact on access.

Research Question 4

Is there consistency between the behaviors of Oregon's community college leaders as indicated by past and planned use of rightsizing strategies and the leaders' strategy ratings relative to the impact on educational access?

Summary of Significant Findings for Question 4

- (a) Research data collected on past strategy use (Question 1) and on how leaders rated the strategys' impact on educational access (Question 3) indicated generally consistent rightsizing behavior, favoring educational access (see Figure 23).
- (b) Research data collected on planned strategy use (Question 2) and on how leaders rated strategys' impact on educational access (Question 3) indicated generally consistent rightsizing behavior, favoring educational access (see Figure 24).
- (c) Although leadership's behavior was generally consistent with the mission of open access, exceptions also existed such as broad use of the strategy to *increase tuition*--rated the most detrimental strategy of all to student access (see Table 45 and 46).
- (d) Planned behavior indicated a greater alignment with open access than did past behavior (see Figure 23 and 24).

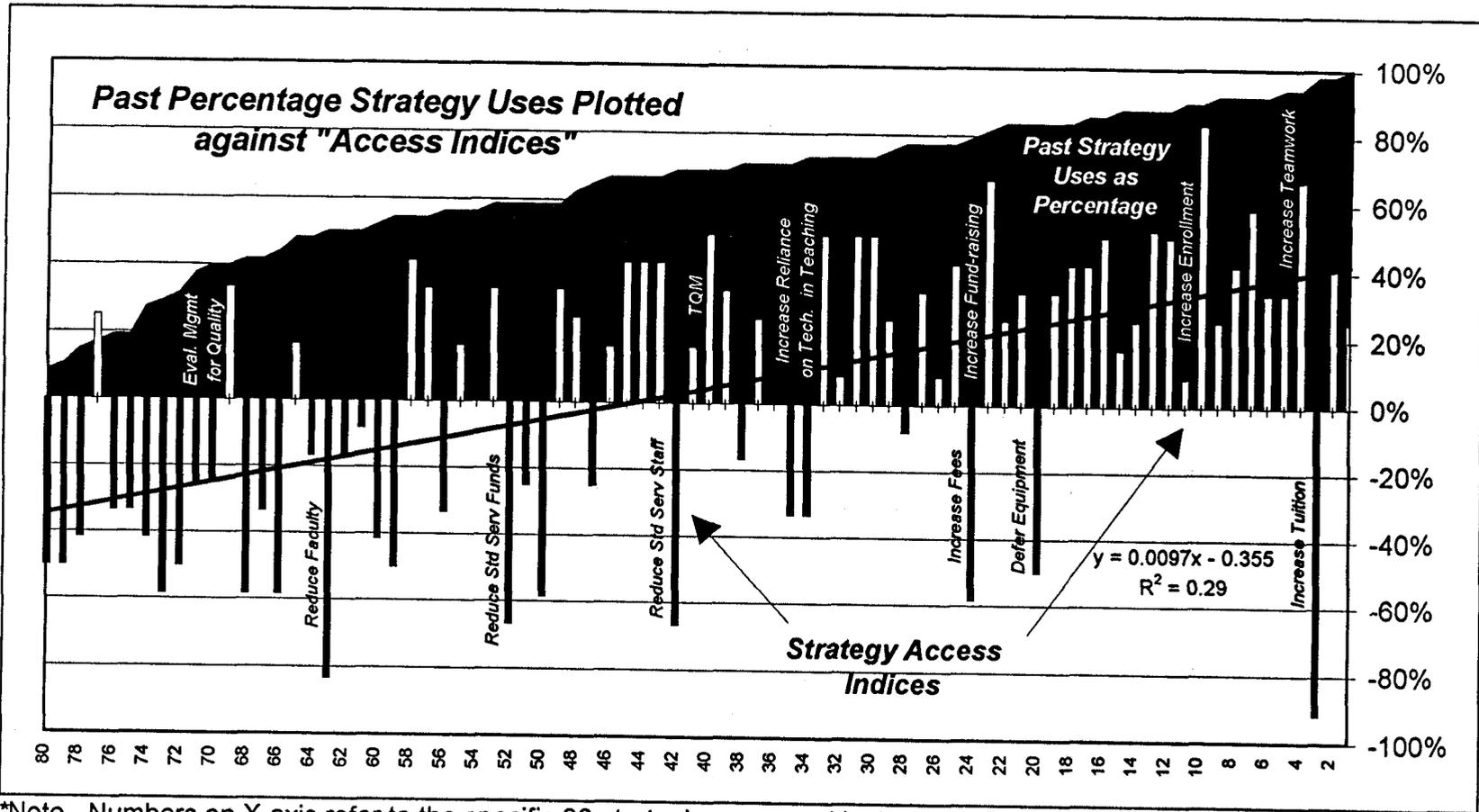
Detailed Data Presentation and Analysis

This research question went to the heart of the purpose of this study. It was addressed by comparing past and planned rightsizing data collected in Phase I with strategy access ratings collected in Phase II. In a Tylerian sense, management actions are proxy measures of leadership "behaviors." These leadership behaviors are reasonably expected to support the publicly asserted

goals of the institutions. In this study, the institutions were Oregon's community colleges with the broad institutional goal (i.e., "mission") of open educational access. A comparison of college leaderships' rightsizing behaviors, both past and contemplated, with their perceived value of these behaviors to contribute to the college mission of open educational access provided evidence of commitment to their professed goal.

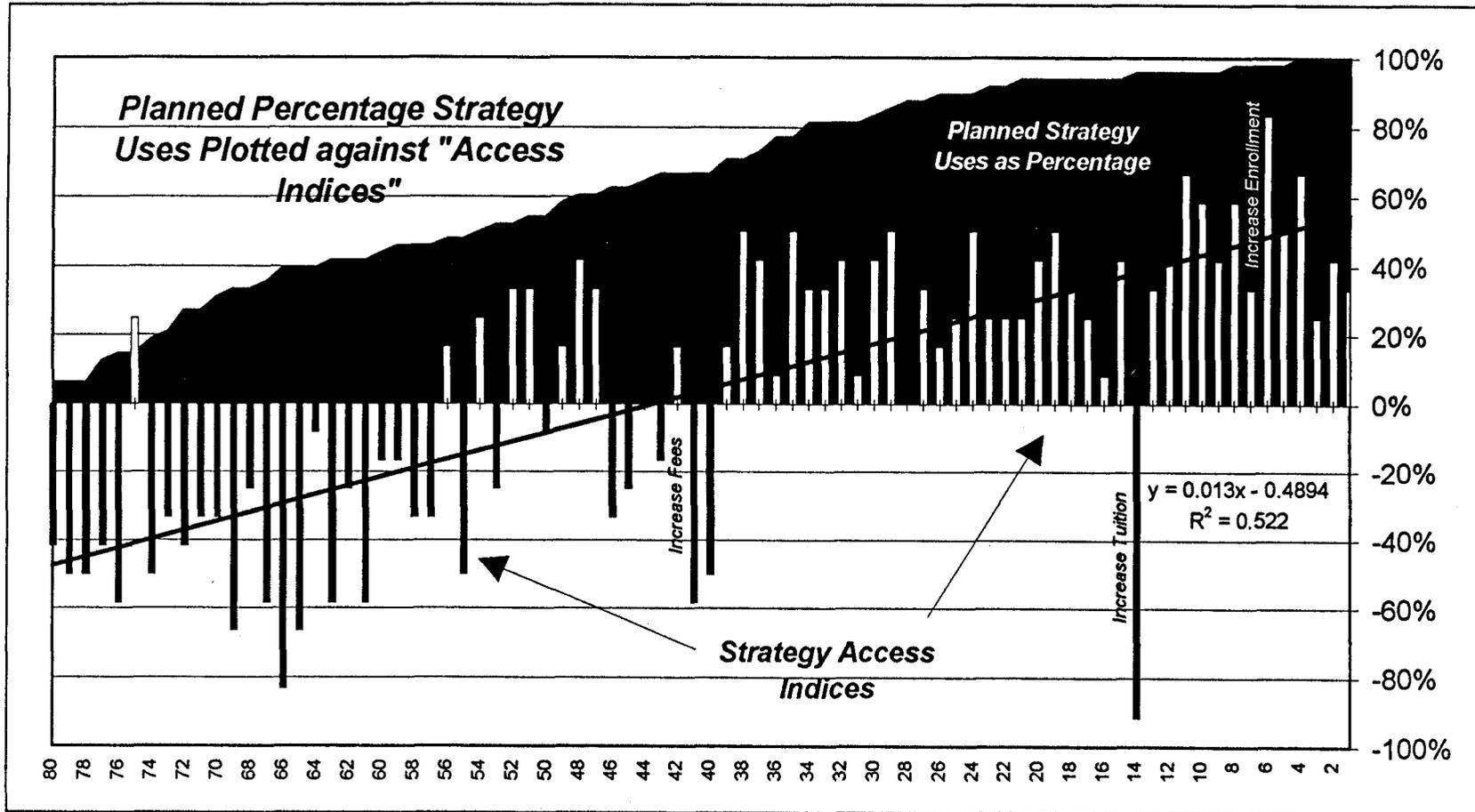
Figures 23 and 24 present comprehensive overviews of the data collected in the study. The black areas in the figures graph strategy use as percentages. The top 25 strategies in Figures 23 and 24 are also presented in more detail in Tables 45 and 46, respectively. Figures 23 and 24 also graph as vertical bar charts the Access Indices for each of the strategies used and planned. Access information related to each of the top 25 strategies is also presented in Tables 45 and 46. Specifically, those strategies listed in the tables with *positive Access Indices are shaded gray*; those strategies listed with *negative Access Indices are shaded black*; and those strategies listed in the tables perceived as having *no impact on access (i.e., a zero Access Index) have no shading at all*.

Figure 23
 Rightsizing Strategies Plotted as Percentage of Past Leader Uses
 with Associated Access Indices*



*Note. Numbers on X-axis refer to the specific 80 strategies surveyed in the study. They are listed in Appendix D.

Figure 24
 Rightsizing Strategies Plotted as Percentage of Planned Leader Uses
 with Associated Access Indices



Note. Numbers on X-axis refer to the specific 80 strategies surveyed in the study. They are listed in Appendix D.

The information as presented in Figures 23 and 24 and Tables 46 and 47 portrayed a leadership behavior consistent with maintaining open educational access. Regression lines were calculated on the access indices data in both figures. As indicated from the slope of these lines, a general positive relationship appeared to exist between the leadership's use of strategies and whether those strategies positively impacted student access. This leadership behavior supporting open access was more pronounced in the planned strategy use data as shown in Figure 24.

There were numerous exceptions to the general rightsizing behavior of using strategies with positive access indices. The most apparent was found in the extensive use of the strategy to "Increase tuition." As shown in Table 45, increasing tuition had the highest negative access rating of all 80 strategies surveyed. Accordingly, its past and planned use to the extent indicated by the data was not consistent behavior for leaders of institutions promoting the mission of open educational access. It should be noted, however, the planned use of tuition increases appeared to be less extensive than past use.

Table 45
 Top 25 Strategies Used by Leaders
 with Associated Access Impact Information*

Rank	Strategy	N=48	%
1	Communicate with staff regarding budget constraints.	48	100%
2	Communicate with faculty regarding budget constraints.	47	98%
3	Increase tuition.	47	98%
4	Emphasize teamwork across departments.	45	94%
5	Involve staff in strategy suggestions for budgetary constraints.	45	94%
6	Build formal partnerships with business and industry.	44	92%
7	Build formal partnerships with high schools.	44	92%
8	Encourage institutional focus on the customer.	44	92%
9	Reallocate positions when they become available.	44	92%
10	Increase institutional enrollment.	43	90%
11	Reduce positions through attrition.	43	90%
12	Cultivate alternative funding sources.	42	88%
13	Offer new courses based on high demand.	42	88%
14	Perform cost analysis before strategy implementation.	42	88%
15	Reduce administrative costs.	42	88%
16	Encourage development of new credit programs.	41	85%
17	Involve faculty in strategy suggestions for budgetary constraints.	41	85%
18	Assess quality of academic programs.	40	83%
19	Communicate with general public regarding budget constraints.	40	83%
20	Defer equipment purchases.	40	83%
21	Increase reliance on technology in administrative functions.	40	83%
22	Reengineer work processes.	40	83%
23	Increase fund-raising and development efforts.	39	81%
24	Increase student fees.	38	79%
25	Assess quality of support programs.	37	77%

*Note. Strategy shadings indicate the leaderships' perceived impact of the strategy on educational access, as determined by Phase II ratings. Gray shadings indicate strategies with a perceived positive impact on access. Black shadings indicate strategies with a perceived negative impact on access. No shadings indicate strategies with no or only minor perceived impact on access.

Table 46
 Top 25 Strategies Planned for Use by Leaders
 with Associated Access Impact Information*

Rank	Strategy	N=48	%
1	Build formal partnerships with business and industry.	48	100%
2	Communicate with faculty regarding budget constraints.	48	100%
3	Communicate with staff regarding budget constraints.	48	100%
4	Increase fund-raising and development efforts.	48	100%
5	Cultivate alternative funding sources.	47	98%
6	Increase institutional enrollment.	47	98%
7	Involve staff in strategy suggestions for budgetary constraints.	47	98%
8	Offer new courses based on high demand.	47	98%
9	Assess quality of academic programs.	46	96%
10	Build formal partnerships with high schools.	46	96%
11	Emphasize teamwork across departments.	46	96%
12	Encourage institutional focus on the customer.	46	96%
13	Increase reliance on technology in administrative functions.	46	96%
14	Increase tuition.	46	96%
15	Assess quality of support programs.	45	94%
16	Communicate with business/industry regarding bdtg constraints.	45	94%
17	Conduct mission-based reviews of academic areas.	45	94%
18	Evaluate institutional mission related to effectiveness.	45	94%
19	Increase reliance on technology in teaching and learning.	45	94%
20	Involve faculty in strategy suggestions for budgetary constraints.	45	94%
21	Perform cost analysis before strategy implementation.	45	94%
22	Reallocate positions when they become available.	44	92%
23	Reengineer work processes.	44	92%
24	Encourage development of new credit programs.	43	90%
25	Provide mechanisms for ongoing customer feedback.	43	90%

*Note. Strategy shadings indicate the leaderships' perceived impact of the strategy on educational access, as determined by Phase II ratings. Gray shadings indicate strategies with a perceived positive impact on access. Black shadings indicate strategies with a perceived negative impact on access. No shadings indicate strategies with no or only minor perceived impact on access.

Consistency of Leadership's Rightsizing Behavior
Grouped by FTE Categories

Tables 47 and 48 present summary information relating to the behavioral consistency of Oregon's community college leaders grouped by FTE Category. As the two tables indicate, smaller FTE Categories appeared to have avoided the use of rightsizing strategies with negative access implications better than larger FTE Categories. The strategy to "Increase student fees," for instance, was used in the past by 67% of FTE Category I leaders, while 100% of Category IV leaders increased student fees. Similarly, 92% of FTE Category I leaders increased tuition in the past, while 100% of FTE Category IV leaders increased tuition. In terms of planned strategy use, 83% of FTE Category I leaders planned to increase tuition, while 100% of FTE Category IV leaders planned to increase tuition.

The larger FTE Categories appeared to make much better use of past strategies having a positive impact on access. As Table 47 shows, larger FTE Categories made significantly more use of strategies with positive access ratings than did smaller FTE Categories. The data in Table 48 indicated that this situation may be changing. As shown in the table, Category I leaders planned to increase substantially the use of positively impacting strategies in the future.

Table 47
 Top 25 Strategies Used by FTE Category IV Leaders with Relative Strategy Use by FTE Categories I, II, and III and Access Impact Information*

	Strategy	FTE Categories			
		I <1500 n=12	II 1500- 2499 n=12	III 2500- 5499 n=12	IV 5500≥ n=12
1	Assess quality of academic programs.	67%	75%	92%	100%
2	Assess quality of support programs.	67%	67%	75%	100%
3	Build formal partnerships with bus & industry.	67%	100%	100%	100%
4	Build formal partnerships with high schools.	83%	92%	92%	100%
5	Communicate with faculty regarding constraints.	92%	100%	100%	100%
6	Communicate with staff regarding bdgt constraints.	100%	100%	100%	100%
7	Cultivate alternative funding sources.	75%	83%	92%	100%
8	Emphasize teamwork across departments.	92%	92%	92%	100%
9	Encourage development of new credit programs.	83%	75%	83%	100%
10	Encourage institutional focus on the customer.	92%	75%	100%	100%
11	Increase fund-raising and development efforts.	50%	75%	100%	100%
12	Increase institutional enrollment.	92%	83%	83%	100%
13	Increase reliance on tech. in admin. functions.	58%	83%	92%	100%
14	Increase reliance on technology in student services	50%	42%	92%	100%
15	Increase student fees.	67%	75%	75%	100%
16	Increase tuition.	92%	100%	100%	100%
17	Involve faculty in strategy for bdgt constraints.	83%	75%	83%	100%
18	Involve staff in strategy for budgetary constraints.	92%	83%	100%	100%
19	Offer new courses based on high demand.	83%	75%	92%	100%
20	Reduce administrative costs.	67%	83%	100%	100%
21	Reduce positions through attrition.	67%	92%	100%	100%
22	Build formal partnerships with four-year colleges.	33%	75%	92%	92%
23	Build formal partnerships with other com. colleges.	92%	33%	75%	92%
24	Communicate with public regarding constraints.	75%	83%	83%	92%
25	Defer equipment purchases.	100%	67%	75%	92%

*Note. Strategy shadings indicate the leaderships' perceived impact of the strategy on educational access, as determined by Phase II ratings. Gray shadings indicate strategies with a perceived positive impact on access. Black shadings indicate strategies with a perceived negative impact on access. No shadings indicate strategies with no or only minor perceived impact on access.

Table 48
 Top 25 Strategies Planned for Use by FTE Category IV Leaders with Relative Strategy Use by FTE Categories I, II, and III and Access Impact Information*

	Strategy	FTE Categories			
		I	II	III	IV
		<1500 n=12	1500- 2499 n=12	2500- 5499 n=12	5500≥ n=12
1	Assess quality of academic programs.	100%	83%	100%	100%
2	Build formal partnerships with bus. and industry.	100%	100%	100%	100%
3	Communicate with bus. regarding bdgt constraints.	92%	92%	92%	100%
4	Communicate with faculty regarding constraints..	100%	100%	100%	100%
5	Communicate with staff regarding bdgt constraints.	100%	100%	100%	100%
6	Conduct mission-based reviews of academic areas.	100%	92%	83%	100%
7	Cultivate alternative funding sources.	100%	92%	100%	100%
8	Emphasize teamwork across departments.	100%	92%	92%	100%
9	Encourage institutional focus on the customer.	100%	83%	100%	100%
10	Increase fund-raising and development efforts.	100%	100%	100%	100%
11	Increase institutional enrollment.	100%	92%	100%	100%
12	Increase reliance on technology in administrative	100%	92%	92%	100%
13	Increase reliance on technology in student services	83%	75%	92%	100%
14	Increase tuition.	83%	100%	100%	100%
15	Involve faculty in strategy for bdgt constraints.	100%	92%	83%	100%
16	Involve staff in strategy for budgetary constraints.	100%	92%	100%	100%
17	Offer new courses based on high demand.	100%	92%	100%	100%
18	Reallocate positions when they become available.	75%	100%	92%	100%
19	Reduce administrative costs.	67%	92%	100%	100%
20	Assess quality of support programs.	100%	92%	92%	92%
21	Build formal partnerships with four-year colleges.	50%	100%	100%	92%
22	Build formal partnerships with high schools.	100%	92%	100%	92%
23	Communicate with public regarding constraints.	83%	92%	83%	92%
24	Conduct mission-based reviews of support areas.	83%	83%	67%	92%
25	Encourage development of new credit programs.	92%	83%	92%	92%

*Note. Strategy shadings indicate the leaderships' perceived impact of the strategy on educational access, as determined by Phase II ratings. Gray shadings indicate strategies with a perceived positive impact on access. Black shadings indicate strategies with a perceived negative impact on access. No shadings indicate strategies with no or only minor perceived impact on access.

Consistency of Leadership's Rightsizing Behavior
Grouped by Leadership Areas

Tables 49 and 50 present summary information relating to the behavioral consistency of Oregon's community college leaders grouped by leadership areas. As the two tables indicate, there was a great deal of similarity among the three sets of leader responses. This was reasonably expected behavior. One overall observation was that there were markedly reduced levels of planned rightsizing strategies with negative impacts on students access.

Table 49 shows that, based on instructional dean rankings, four strategies with negative impacts on access were employed extensively in the past. These were to "Increase tuition," "Defer equipment purchases," "Increase student fees," and "Reduce number of administrative positions." Table 50 indicates that of these four strategies used in the past, only the strategy to "Increase tuition" was planned for future use. Moreover, the use of this strategy was not planned for use as extensively as before, with many other strategies with positive access impact having priority.

Table 49
 Top 25 Strategies Reported as "Used" by Instructional Deans with Relative Strategy Use by Business Officers and Deans of Students and Associated Access Impact Information*

Rank	Strategy	Operational Leadership Categories		
		Deans of Stdts. n=16	Bus. Mgrs. n=16	Deans of Inst. n=16
1	Communicate with faculty regarding budget	100%	94%	100%
2	Communicate with staff regarding budget constraints.	100%	100%	100%
3	Increase tuition.	100%	94%	100%
4	Perform cost analysis before strategy implementation.	75%	88%	100%
5	Reallocate positions when they become available.	81%	94%	100%
6	Build formal partnerships with high schools.	88%	94%	94%
7	Communicate with bus/ind regarding bdtg constraints.	69%	69%	94%
8	Cultivate alternative funding sources.	81%	88%	94%
9	Defer equipment purchases.	75%	81%	94%
10	Emphasize teamwork across departments.	94%	94%	94%
11	Increase institutional enrollment.	81%	94%	94%
12	Involve staff in strategy for budgetary constraints.	88%	100%	94%
13	Reduce positions through attrition.	88%	88%	94%
14	Build formal partnerships with business and industry.	94%	94%	88%
15	Build formal partnerships with other com. colleges.	56%	75%	88%
16	Communicate with public regarding bdtg constraints.	88%	75%	88%
17	Increase fund-raising and development efforts.	75%	81%	88%
18	Increase student fees.	75%	75%	88%
19	Increase the use of adjunct faculty.	44%	75%	88%
20	Reduce administrative costs.	75%	100%	88%
21	Reduce number of administrative positions.	75%	69%	88%
22	Assess quality of academic programs.	81%	88%	81%
23	Conduct enrollment management studies.	69%	50%	81%
24	Encourage institutional focus on the customer.	94%	100%	81%
25	Increase reliance on technology in administrative	75%	94%	81%

*Note. Strategy shadings indicate the leaderships' perceived impact of the strategy on educational access, as determined by Phase II ratings. Gray shadings indicate strategies with a perceived positive impact on access. Black shadings indicate strategies with a perceived negative impact on access. No shadings indicate strategies with no or only minor perceived impact on access.

Table 50
 Top 25 Strategies Planned for use by Instructional Deans with Relative
 Strategy Plans by Business Officers and Deans of Students
 and Access Impact Information*

Rank	Strategy	Operational Leadership Categories		
		Deans of Stdts. n=16	Bus. Mgrs. n=16	Deans of Inst. n=16
1	Build formal partnerships with business and industry.	100%	100%	100%
2	Build formal partnerships with high schools.	88%	100%	100%
3	Communicate with bus/ind regarding budget constraints.	88%	94%	100%
4	Communicate with faculty regarding budget constraints.	100%	100%	100%
5	Communicate with public regarding budget constraints.	88%	75%	100%
6	Communicate with staff regarding budget constraints.	100%	100%	100%
7	Conduct enrollment management studies.	81%	63%	100%
8	Cultivate alternative funding sources.	94%	100%	100%
9	Emphasize teamwork across departments.	94%	94%	100%
10	Increase fund-raising and development efforts.	100%	100%	100%
11	Increase institutional enrollment.	94%	100%	100%
12	Involve faculty in strategy for budgetary constraints.	94%	88%	100%
13	Involve staff in strategy for budgetary constraints.	94%	100%	100%
14	Offer new courses based on high demand.	94%	100%	100%
15	Perform cost analysis before strategy implementation.	81%	100%	100%
16	Reallocate positions when they become available.	88%	88%	100%
17	Assess quality of academic programs.	94%	100%	94%
18	Assess quality of support programs.	88%	100%	94%
19	Build formal partnerships with other community colleges.	56%	81%	94%
20	Conduct mission-based reviews of academic areas.	88%	100%	94%
21	Encourage institutional focus on the customer.	94%	100%	94%
22	Evaluate institutional mission as it relates to effectiveness.	88%	100%	94%
23	Increase reliance on technology in admin. functions.	94%	100%	94%
24	Increase tuition.	94%	100%	94%
25	Provide mechanisms for ongoing customer feedback.	75%	100%	94%

*Note. Strategy shadings indicate the leaderships' perceived impact of the strategy on educational access, as determined by Phase II ratings. Gray shadings indicate strategies with a perceived positive impact on access. Black shadings indicate strategies with a perceived negative impact on access. No shadings indicate strategies with no or only minor perceived impact on access.

Consistency of Leadership's Rightsizing Behavior
Grouped by "Equity" and "Floored" Status

Tables 51 and 52 present summary information relating to the behavioral consistency of Oregon's community college leaders grouped by "Equity" and "Floored" status. As the two tables indicate, there was an obvious degree of similarity between the use of rightsizing strategies and the status of the colleges. There were some discrepancies, however. As shown in Table 51, "Equity" colleges appeared to make a greater past use of strategies with a negative impact on access. Table 52 shows that this was not necessarily planned to continue. As the table shows, both "Equity" and "Floored" colleges planned to reduce levels of most negative access impacting strategies in the future. The strategy to "Increase tuition" was the only exception to this of the 25 top strategies listed.

Overall, it was apparent from the data that past and planned use of rightsizing strategies by "Equity" colleges was more extensive than that for "Floored" colleges. Additionally, as Table 52 indicates, "Equity" colleges planned to make greater use of strategies positively impacting student access.

Table 51
 Top 25 Strategies Used by "Equity" College Leaders with Relative
 "Floored" College Use and Associated Access Impact Information*

Rank	Strategy	"Floored" n=21	"Equity" n=27
1	Communicate with staff regarding budget constraints.	100%	100%
2	Increase tuition.	95%	100%
3	Communicate with faculty regarding budget	100%	96%
4	Encourage institutional focus on the customer.	86%	96%
5	Involve staff in strategy suggestions for budgetary	90%	96%
6	Build formal partnerships with high schools.	90%	93%
7	Defer equipment purchases.	71%	93%
8	Emphasize teamwork across departments.	95%	93%
9	Increase institutional enrollment.	86%	93%
10	Perform cost analysis before strategy implementation.	81%	93%
11	Reduce administrative costs.	81%	93%
12	Build formal partnerships with other community	52%	89%
13	Communicate with general public regarding budget	76%	89%
14	Cultivate alternative funding sources.	86%	89%
15	Offer new courses based on high demand.	86%	89%
16	Reallocate positions when they become available.	95%	89%
17	Reengineer work processes.	76%	89%
18	Assess quality of academic programs.	81%	85%
19	Build formal partnerships with business and industry.	100%	85%
20	Encourage development of new credit programs.	86%	85%
21	Involve faculty in strategy suggestions for budgetary	86%	85%
22	Provide mechanisms for ongoing customer feedback.	52%	85%
23	Reduce positions through attrition.	95%	85%
24	Assess quality of support programs.	71%	81%
25	Defer facility and equipment maintenance.	57%	81%

*Note. Strategy shadings indicate the leaderships' perceived impact of the strategy on educational access, as determined by Phase II ratings. Gray shadings indicate strategies with a perceived positive impact on access. Black shadings indicate strategies with a perceived negative impact on access. No shadings indicate strategies with no or only minor perceived impact on access.

Table 52
 Top 25 Strategies Planned for Use by “Equity” College Leaders
 with Relative “Floored” College Plans and Access Impact Information*

Rank	Strategy	“Floored” n=21	“Equity” n=27
1	Assess quality of academic programs.	90%	100%
2	Build formal partnerships with business and industry.	100%	100%
3	Communicate with faculty regarding budget	100%	100%
4	Communicate with staff regarding budget constraints.	100%	100%
5	Conduct mission-based reviews of academic areas.	86%	100%
6	Cultivate alternative funding sources.	95%	100%
7	Encourage institutional focus on the customer.	90%	100%
8	Increase fund-raising and development efforts.	100%	100%
9	Increase institutional enrollment.	95%	100%
10	Involve staff in strategy suggestions for budgetary	95%	100%
11	Offer new courses based on high demand.	95%	100%
12	Assess quality of support programs.	90%	96%
13	Build formal partnerships with high schools.	95%	96%
14	Emphasize teamwork across departments.	95%	96%
15	Evaluate institutional mission as it relates to	90%	96%
16	Increase reliance on technology in administrative	95%	96%
17	Communicate with business/industry regarding budget	95%	93%
18	Communicate with general public regarding budget	81%	93%
19	Increase reliance on technology in teaching and	95%	93%
20	Increase tuition.	100%	93%
21	Involve faculty in strategy suggestions for budgetary	95%	93%
22	Perform cost analysis before strategy implementation.	95%	93%
23	Provide mechanisms for ongoing customer feedback.	86%	93%
24	Reduce administrative costs.	86%	93%
25	Build formal partnerships with other community	62%	89%

*Note. Strategy shadings indicate the leaderships' perceived impact of the strategy on educational access, as determined by Phase II ratings. Gray shadings indicate strategies with a perceived positive impact on access. Black shadings indicate strategies with a perceived negative impact on access. No shadings indicate strategies with no or only minor perceived impact on access.

Chapter Summary

Research Question 1

What rightsizing strategies have Oregon's community college leaders employed to cope with the changing environment?

Summary of Significant Findings for Question 1

- (a) The strategy to *increase tuition* received consistently high past use (see Tables 3, 4, 14, 18, and 21).
- (b) The strategies to *reduce positions through attrition and reallocate positions when they become available* received high past use (see Tables 5, 6, 14, 18 and 21).
- (c) By strategy taxonomy, "*quality*" *culture development* strategies had the greatest overall use with *revenue enhancing* strategies and *process reengineering strategies* second and third most popular, respectively (see Figure 7).
- (d) All Institutional FTE Categories made extensive use of the strategy to *communicate with staff regarding budget constraints* (see Table 14).
- (e) Smaller FTE Categories I and II used all strategies less than larger FTE Categories III and IV (see Table 14 and Figure 9).

Research Question 2

What rightsizing strategies do Oregon's community college leaders plan to employ to cope with the changing environment?

Summary of Significant Findings for Question 2

- (a) Strategies to *build formal partnerships* and *communicate budgetary problems* received high indicated planned use (see Tables 22, 28, 33, 37, and 40).
- (b) Strategies to *increase fund raising efforts, cultivate alternative funding sources, increase enrollment, and increase tuition* were popular planned strategies (see Tables 22, 23, and 33)
- (c) By strategy taxonomy, leaders planned to use *"quality" culture development, process reengineering, quality and productivity incentives, and revenue enhancing* strategies most of all, with the planned use level of *cost cutting* strategies less than half that of these strategies (see Figure 15).
- (d) The smaller FTE Categories I and II had a higher overall planned level of strategy use than past use, while the converse was true for larger FTE Categories III and IV (see Figures 9 and 17).
- (e) Leadership areas of responsibility indicated a plan to make extensive use of strategies to *build a "quality culture"* and to *enhance revenues* (see Table 33).

Research Question 3

How do Oregon's community college leaders rate rightsizing options in terms of the strategys' impact on educational access?

Summary of Significant Findings for Question 3

- (a) Strategies to *increase enrollment* and *increase fundraising efforts* were rated highly as facilitating student educational access (see Table 42).
- (b) Strategies to *reduce faculty*, *reduce staffing in student services*, and *reduce funding for student services* were rated highly as impairing student educational access (see Table 43).
- (c) Strategies to *increase tuition* and *increase student fees* were rated highly as impairing student educational access (see Table 43).

Research Question 4

Is there consistency between the behaviors of Oregon's community college leaders as indicated by past and planned use of rightsizing strategies and the leaders' strategy ratings relative to the impact on educational access?

Summary of Significant Findings for Question 4

- (a) Research data collected on past strategy use (Question 1) and on how leaders rated the strategys' impact on educational access (Question 3) indicated generally consistent rightsizing behavior, favoring educational access (see Figure 23).
- (b) Research data collected on planned strategy use (Question 2) and on how leaders rated strategys' impact on educational access (Question 3) indicated generally consistent rightsizing behavior, favoring educational access (see Figure 24).
- (c) Although leadership's behavior was generally consistent with the mission of open access, exceptions also existed such as broad use of the strategy to *increase tuition*--rated the most detrimental strategy of all to student access (see Table 45 and 46).
- (d) *Planned* behavior indicated a greater alignment with open access than did *past* behavior (see Figure 23 and 24).

CHAPTER 5 SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

The purpose of this study was to evaluate the consistency between the rightsizing behavior of Oregon's community college leaders and the mission of open educational access. This chapter presents a study summary; study conclusions; recommendations for future research; and implications for professional practice.

Study Summary

This study evaluated community college leadership behavior. As such, it was descriptive and interpretive in nature. Specifically, the intent was to evaluate whether chief operational leaders of Oregon's community colleges were behaving consistently with one of the primary institutional mission elements—open educational access.

The theoretical framework for the study was based on a Tylerian objective-oriented evaluation approach (Worthen & Sanders, 1987). This approach calls for (a) the identification of broad organizational goals; (b) a definition of the goals in behavioral terms; (c) the development of a behavioral evaluation instrument; and (d) a comparison of the behaviorally defined goals with the demonstrated behavioral data collected by the instrument. The

objective-oriented evaluation design was well suited to this particular study as it permitted a comparison of an established goal (in this case, the community college mission of open access) with behaviors both demonstrated and contemplated (in this case, through implementation of rightsizing strategies). Ultimately, this comparison revealed if community college leaders were acting in a manner consistent with the professed mission of open educational access.

The scope of this study was limited to four specific research objectives: (a) to ascertain what rightsizing strategies Oregon community college leaders have used in the past; (b) to ascertain what rightsizing strategies Oregon community college leaders planned to use in the future; (c) to ascertain how these community college leaders rate strategies used and planned for use relative to educational access; and (d) to evaluate the consistency between leadership behaviors indicated by past and planned use of strategies and leadership ratings of strategies relative to their impact on educational access.

These objectives were accomplished through a two phase data collection process involving the Oregon community college leadership population. Phase I of data collection consisted of all chief operational leaders responsible for instructional services, student services, and administrative services from each of the state's 16 community colleges. A survey instrument was developed and grounded in the literature of decline management. This instrument consisted of 80 conceptual phrases describing various decline management strategies. Once developed, a draft of the survey instrument was pilot tested on a peer sample of Washington state community college leaders.

Feedback from this pilot test was incorporated into the final study instrument found in Appendix B. When the instrument was administered to Oregon respondents, they were asked to indicate for each strategy (a) whether they had used the strategy in the *past* and (b) whether they *planned* to use the strategy in the future. Overall, the Phase I survey received a 100% response rate.

Phase II of data collection involved assembly and survey of a panel of Oregon community college leaders. These leaders were purposefully selected from the Phase I population to rate each of the 80 strategies on the Phase I survey instrument relative to its perceived impact on educational access. Using a five point Likert-type scale, panelists rated each strategy as to its positive, negative, or neutral impact on educational access. The ratings received from panelists were used to derive an "Access Index" for each strategy. The Phase II survey also received a 100% response rate. Information collected from Phases I and II formed the database for the research study.

Once data were collected, they were grouped and analyzed by various dimensions. These dimensions included strategies grouped by rightsizing strategy taxonomy; by institutional FTE Category; by leadership responsibility area; and by "Equity" and "Floored" college status. The criteria for each of these groupings is described and detailed in Chapters 2 and 3. These dimensions enabled a comprehensive behavioral profile of the leadership and substantial triangulation to support study conclusions.

Table 53 presents a summary of data collected in the study. The table is organized according to the rightsizing strategy taxonomy presented in Chapter 2. It contains information on past and planned strategy use and how each strategy was rated by participants based on its impact on educational access.

The shadings within Table 53 indicate the perceived impact of the strategies on educational access. Strategies *highlighted gray* represent those with a *positive Access Index*, indicating a leader perception that these strategies facilitate student access. Strategies *highlighted black* represent strategies with a *negative Access Index*, indicating a leader perception that these strategies impede student access. The two strategies with *no highlight* have a *zero Access Index*, indicating a leader perception that these strategies have little or no impact on student access. Table 53 also presents strategy “Change in Use” information. Positive changes in the column indicate an increase in strategy use, and the converse.

Table 53
 Summary Study Data by Rightsizing Taxonomy
 with Related Strategy Access Information*

CONVENTIONAL STRATEGIES:

#	Cost Reducing Strategies	Past Use	Planned Use	Chg in Use
1	Limit enrollment in certain programs.	58%	63%	4%
2	Increase student/faculty ratios.	56%	58%	2%
3	Reduce administrative costs.	88%	90%	2%
4	Encourage sabbatical leaves without pay.	17%	15%	-2%
5	Reduce summer schools expenditures.	44%	42%	-2%
6	Reduce off-campus credit programs.	8%	6%	-2%
7	Increase the use of adjunct faculty.	69%	67%	-2%
8	Limit institutional enrollment.	10%	6%	-4%
9	Eliminate or reduce bulk mailings.	48%	44%	-4%
10	Reduce funds for copying expenditures.	50%	46%	-4%
11	Reduce funds for telephone expenditures.	38%	33%	-4%
12	Reduce travel budgets.	71%	67%	-4%
13	Reduce number of part-time positions.	54%	48%	-6%
14	Reduce weekend programs and classes.	15%	6%	-8%
15	Reduce number of support staff positions.	73%	63%	-10%
16	Initiate a hiring freeze.	56%	46%	-10%
17	Reduce custodial services.	50%	40%	-10%
18	Reduce funds for professional development.	42%	31%	-10%
19	Reduce funding for library.	31%	19%	-13%
20	Reduce positions through attrition.	90%	77%	-13%
21	Reduce staffing in library services.	27%	13%	-15%
22	Reduce library hours.	29%	15%	-15%
23	Defer equipment purchases.	83%	67%	-17%
24	Reduce funding for student services.	58%	40%	-19%
25	Initiate across-the-board cuts.	58%	35%	-23%
26	Reduce secretarial services.	65%	42%	-23%
27	Reduce number of administrative positions.	77%	54%	-23%
28	Defer facility and equipment maintenance.	71%	46%	-25%
29	Reduce positions through layoffs.	52%	27%	-25%
30	Reduce staffing in student services.	69%	33%	-35%

Table 53, Continues

Table 53, Continued

#	Revenue Enhancing Strategies	Past Use	Planned Use	Chg in Use
1	Increase fund-raising and development efforts.	81%	100%	19%
2	Communicate with bus/ind regarding budget constraints.	77%	94%	17%
3	Conduct enrollment management studies.	67%	81%	15%
4	Cultivate alternative funding sources.	88%	98%	10%
5	Initiate or increase parking fees.	19%	27%	8%
6	Increase institutional enrollment.	90%	98%	8%
7	Increase tuition.	98%	96%	-2%
8	Increase student fees.	79%	67%	-13%

INNOVATIVE STRATEGIES:

#	Institutional Reshaping Strategies	Past Use	Planned Use	Chg in Use
1	Conduct mission-based reviews of academic areas.	75%	94%	19%
2	Evaluate institutional mission related to effectiveness.	77%	94%	17%
3	Reduce the scope of activities of the institution.	40%	52%	13%
4	Offer new courses based on high demand.	88%	98%	10%
5	Encourage development of new credit programs.	85%	90%	4%
6	Reduce devel. and adult basic education programs.	19%	21%	2%
7	Reallocate positions when they become available.	92%	92%	0%
8	Reduce non-traditional programs or courses.	42%	42%	0%
9	Revise institutional role and mission.	58%	54%	-4%
10	Reduce number of faculty positions.	50%	40%	-10%
11	Implement early retirement incentive programs.	63%	50%	-13%

#	Productivity and Quality Incentive Strategies	Past Use	Planned Use	Chg in Use
1	Increase reliance on technology in teaching and learning.	73%	94%	21%
2	Increase reliance on technology in student services areas.	71%	88%	17%
3	Assess quality of academic programs.	83%	96%	13%
4	Evaluate management for bdgt constraints on quality.	40%	52%	13%
5	Involve faculty in strategy for bdgt constraints.	85%	94%	8%
6	Encourage the use of carry-over funds.	67%	73%	6%
7	Perform cost analysis before strategy implementation.	88%	94%	6%
8	Build formal partnerships with other community	73%	77%	4%

Table 53, Continues

Table 53, Continued

#	Process Reengineering Strategies	Past Use	Planned Use	Chg in Use
1	Increase reliance on technology in admin. functions.	83%	96%	13%
2	Contract out services previously provided internally.	56%	65%	8%
3	Reengineer work processes.	83%	92%	8%

#	"Quality" Culture Strategies	Past Use	Planned Use	Chg in Use
1	Conduct mission-based reviews of administrative areas.	58%	81%	23%
2	Provide mechanisms for ongoing customer feedback.	71%	90%	19%
3	Maintain trends and projections for mgmt decision making.	67%	83%	17%
4	Assess quality of support programs.	77%	94%	17%
5	Build formal partnerships with four-year colleges.	73%	85%	13%
6	Conduct mission-based reviews of support areas.	69%	81%	13%
7	Build formal partnerships with business and industry.	92%	100%	8%
8	Communicate with students regarding bdgt constraints.	73%	81%	8%
9	Increase staff development.	54%	60%	6%
10	Involve students in strategy for budgetary constrains.	54%	60%	6%
11	Build formal partnerships with high schools.	92%	96%	4%
12	Encourage institutional focus on the customer.	92%	96%	4%
13	Utilize institutional planning committee for constraints.	67%	71%	4%
14	Communicate with general public regarding constraints.	83%	88%	4%
15	Involve staff in strategy for budgetary constraints.	94%	98%	4%
16	Communicate with faculty regarding budget constraints.	98%	100%	2%
17	Emphasize teamwork across departments.	94%	96%	2%
18	Implement Total Quality Management concepts.	69%	71%	2%
19	Communicate with staff regarding budget constraints.	100%	100%	0%
20	Utilize ad hoc committee for mgmt of bdgt constraints.	48%	48%	0%

*Note. Strategy shadings indicate leaderships' perceived impact of the strategy on educational access, as determined by Phase II ratings. Gray shadings indicate strategies with a perceived positive impact on access. Black shadings indicate strategies with a perceived negative impact on access. No shadings indicate strategies with no or only minor perceived impact on access.

Study Conclusions

Judd, Smith, & Kidder (1991) contend that descriptive survey research is not concerned with causality, but rather its focus is on “how many people believe something or act in a certain way or have a certain characteristic” (p. 101). Consistent with this, the aim of this study was to describe past and planned rightsizing behavior and to evaluate this behavior relative to the mission of open educational access. The following conclusions are based on the findings and analyses of the data collected in this study as presented in Chapter 4.

Summary of Significant Conclusions

- (a) Past and planned behavior of Oregon community college leaders generally supported the open door mission of open access.
- (b) There were material exceptions to the general behavior supporting open access in the broad use of tuition and certain cost reducing strategies to cope with the changing environment.
- (c) Community college leaders may have perceived reaching the marginal limit to any further significant benefits from the use of *conventional* cost reducing strategies.
- (d) Leadership behavior suggested an initial shifting from *conventional* rightsizing strategies (increasing revenues and reducing costs) to the use of more *innovative* strategies (reshaping the institution, developing

quality and productivity incentives, reengineering processes, and building a “quality” culture).

Discussion of Study Conclusions

One of the major conclusions of this study was that Oregon community college leaders indicated a rather strong resolve to support the open door mission. Prior to this study, there had been no systematic research in this state establishing the existence or extent of this behavior. In every dimension examined, the data indicated a general leadership bias towards using strategies facilitating educational access. These dimensions included data analysis grouped by strategy taxonomy, by institutional FTE Category, by leadership area, and by “Equity” and “Floored” college status.

The information presented in Table 53 demonstrates this leadership behavior related to the rightsizing strategy taxonomy. In a static sense, the general relationship indicated in the table is that negative access strategies (*highlighted black*) were employed to a lesser degree than positive access strategies (*highlighted gray*). This was true for both past and planned strategy uses. In a more dynamic sense, the “Change in Use” column also indicates a bias towards positive access strategies. Leaders indicated a decrease in use of the majority of negative access strategies (*highlighted black*) and an increase in use of most of the positive access strategies (*highlighted gray*).

The consistency in leadership behavior supporting the open access mission was also seen in Tables 54 and 55, the top 25 strategies planned for an increase and decrease in use, respectively.

Table 54
Top 25 Strategies Planned for an Increase in Use*

Rank	Strategy	Past Use	Planned Use	Chg in Use
1	Conduct mission-based reviews of admin. areas.	58%	81%	22.9%
2	Increase reliance on technology in teaching.	73%	94%	20.8%
3	Conduct mission-based reviews of academic areas.	75%	94%	18.8%
4	Increase fund-raising and development efforts.	81%	100%	18.8%
5	Provide mechanisms for customer feedback.	71%	90%	18.8%
6	Maintain trends for mgmt decision making.	67%	83%	16.7%
7	Assess quality of support programs.	77%	94%	16.7%
8	Communicate with bus/ind regarding bldg.	77%	94%	16.7%
9	Evaluate institutional mission for effectiveness.	77%	94%	16.7%
10	Increase reliance on technology in student services.	71%	88%	16.7%
11	Conduct enrollment management studies.	67%	81%	14.6%
12	Evaluate mgmt for budgetary constraints on quality.	40%	52%	12.5%
13	Reduce the scope of activities of the institution.	40%	52%	12.5%
14	Assess quality of academic programs.	83%	96%	12.5%
15	Build formal partnerships with four-year colleges.	73%	85%	12.5%
16	Conduct mission-based reviews of support areas.	69%	81%	12.5%
17	Increase reliance on technology in admin. functions.	83%	96%	12.5%
18	Cultivate alternative funding sources.	88%	98%	10.4%
19	Offer new courses based on high demand.	88%	98%	10.4%
20	Build formal partnerships with bus. and ind.	92%	100%	8.3%
21	Communicate with students regarding constraints.	73%	81%	8.3%
22	Contract out services previously provided internally.	56%	65%	8.3%
23	Involve faculty in strategy for budgetary constraints.	85%	94%	8.3%
24	Initiate or increase parking fees.	19%	27%	8.3%
25	Increase institutional enrollment.	90%	98%	8.3%

*Note. Strategy shadings indicate leaderships' perceived impact of the strategy on educational access, as determined by Phase II ratings. Gray shadings indicate strategies with a perceived positive impact on access. Black shadings indicate strategies with a perceived negative impact on access. No shadings indicate strategies with no or only minor perceived impact on access.

Table 55
Top 25 Strategies Planned for a Decrease in Use*

Rank	Strategy	Past Use	Planned Use	Change in Use
1	Reduce staffing in student services.	69%	33%	-35.4%
2	Defer facility and equipment maintenance.	71%	46%	-25.0%
3	Reduce positions through layoffs.	52%	27%	-25.0%
4	Reduce number of administrative positions.	77%	54%	-22.9%
5	Initiate across-the-board cuts.	58%	35%	-22.9%
6	Reduce secretarial services.	65%	42%	-22.9%
7	Reduce funding for student services.	58%	40%	-18.8%
8	Defer equipment purchases.	83%	67%	-16.7%
9	Reduce library hours.	29%	15%	-14.6%
10	Reduce staffing in library services.	27%	13%	-14.6%
11	Implement early retirement incentive programs.	63%	50%	-12.5%
12	Increase student fees.	79%	67%	-12.5%
13	Reduce funding for library.	31%	19%	-12.5%
14	Reduce positions through attrition.	90%	77%	-12.5%
15	Initiate a hiring freeze.	56%	46%	-10.4%
16	Reduce custodial services.	50%	40%	-10.4%
17	Reduce funds for professional development.	42%	31%	-10.4%
18	Reduce number of faculty positions.	50%	40%	-10.4%
19	Reduce number of support staff positions.	73%	63%	-10.4%
20	Reduce weekend programs and classes.	15%	6%	-8.3%
21	Reduce number of part-time positions.	54%	48%	-6.2%
22	Reduce travel budgets.	71%	67%	-4.2%
23	Revise institutional role and mission.	58%	54%	-4.2%
24	Eliminate or reduce bulk mailings.	48%	44%	-4.2%
25	Reduce funds for copying expenditures.	50%	46%	-4.2%

*Note. Strategy shadings indicate leaderships' perceived impact of the strategy on educational access, as determined by Phase II ratings. Gray shadings indicate strategies with a perceived positive impact on access. Black shadings indicate strategies with a perceived negative impact on access. No shadings indicate strategies with no or only minor perceived impact on access.

It is apparent from Table 54 that the top 25 strategies planned for an increase in use were mostly positive access strategies (*highlighted gray*). The converse holds for strategies listed in Table 55, the top 25 strategies slated for

a decrease in use. These strategies were mostly negative access strategies (*highlighted black*). A comprehensive graphical portrayal of these relationships is presented in Figures 23 and 24, in Chapter 4.

These findings of leadership bias towards positive access strategies (and conversely an aversion towards negative access strategies) were particularly poignant given that data were gathered from leaders in a “cloaked survey,” shielding the fact that educational access was in any way the focus of the study.

There was great deal of correlative support for the conclusion that leadership behavior was consistent with the mission of open educational access. This support came from grouping and analyzing data by institutional FTE Category, by leadership area, and by “Equity” and “Floored” college status. These dimensions provided a form of triangulation in support of study conclusions.

The data analysis by FTE Category supported the general consistency in leadership rightsizing behavior. The data showed FTE Categories favored using strategies facilitating educational access. However, the analysis also indicated that institutional size had a bearing on the type and extent of strategy use. For instance, larger institutions (i.e., FTE Categories III and IV) appeared to make much greater use of rightsizing strategies than did smaller institutions. This increased use had both positive and negative aspects. On the positive side, larger institutions indicated greater use of those strategies facilitating student access. This was particularly evident in the use of strategies to build a

“quality” culture. On the negative side, several of the strategies used more extensively by larger colleges were those perceived as detrimental to student access.

The data analysis grouped by leadership area also showed a general consistency between leadership rightsizing behavior and the mission of open access. This consistency, however, was less evident than that indicated by FTE Category data. The greatest evidence of behavioral consistency by leadership area was seen in the change of strategy use from past to planned as shown in Tables 49 and 50. The data indicated all leadership areas were planning a substantial decrease in use of strategies detrimental to educational access.

Finally, the data analysis grouped by “Equity” and “Floored” status lent additional support to leadership’s behavior supporting the mission of open access. Similar to leadership area data, this support was best seen examining the change from past to planned strategy use. The analysis indicated that “Equity” colleges generally made more extensive past use (Table 51) of those strategies with a negative impact on access. Table 52 shows that this situation was mitigated in their planned use of strategies. Both “Equity” and “Floored” college leaders indicated a reduction of detrimental access strategies in the future.

The overall study findings of consistency between leadership rightsizing behavior and support of the open access mission was substantial. However,

examining the data closely there were several specific areas of leadership rightsizing behavior not consistent with open educational access.

The most prevalent contrary behavior in this regard was the extent of past and planned use of the strategy to “Increase tuition.” Leaders from the population indicated a 98% past use and a 96% planned use of this strategy. This was substantial contrary behavior, given leaders rated tuition increases as the most detrimental to student access of all 80 strategies surveyed. This finding was distressing, but not surprising. Prior research in the area of rightsizing management has well established that revenue enhancing strategies are typically the first responses to managing decline (Pew Study Group on Restructuring, 1993). As such, the high percentage uses of the strategy to increase tuition as well as the other revenue enhancing strategies listed in Table 53 were reasonably predictable behaviors. The extensive uses of these strategies may have been reflective of where in the rightsizing process leaders were positioned (see Figure 4).

Another leadership behavior contrary to the mission of open access was the high use of cost reducing strategies. As indicated in Table 53, the majority of cost reducing strategies were rated by leaders as having a negative impact on student access (*highlighted black*). Yet, overall, the level of past use of cost reducing strategies was 52% (see Figure 7). This use was substantial, given the population’s view of these strategies as material hindrances to student access. Additionally, that planned use of cost reducing strategies dropped to 41% (see Figure 15) was not necessarily encouraging. This finding may have

indicated that leaders perceived being close to the minimum margin for cost cuts and that further increases in cuts may begin to impact institutional quality.

Prior research shows that once productive use of conventional strategies (i.e., revenue enhancing and cost cutting strategies) has been exhausted, emphasis shifts to use of more innovative strategies (Pew Study Group on Restructuring, 1993; Riley, 1994). These strategies include reshaping the institution, developing productivity incentives, reengineering work processes, and building a "quality" culture. Based on this rightsizing taxonomy, there was evidence in the study suggesting that some Oregon community college leaders were beginning to shift efforts from conventional to more innovative strategies. Taken together, the population's use and trends in use of both conventional and innovative strategies provided a general indication of where Oregon community colleges were in the overall rightsizing process (see Figure 4). This has important implications in terms of the perceived economic slack remaining in the system, if any, and how imminent a threat to Oregonians there is to a closing of the open door.

Recommendations to Community College Leaders

The following recommendations are based upon a thorough analysis of the findings and reflect the key conclusions of this study. Although there is obvious overlap, the recommendations have been enumerated for clarity. They are directed to all Oregon community college leaders, especially presidents

and chief operational leaders of administrative services, instructional services, and students services. They should also be of interest to community college board members.

Summary of Recommendations

- (a) Community college personnel, in their contact with the public, business and industry leaders, and legislative members, should “tell the story” of open educational access and how community college leadership behavior has been and plans to continue to be consistent with this quintessential mission.
- (b) Leaders should implement an ongoing staff development program for all college personnel regarding issues and processes of rightsizing and how they relate to open educational access.
- (c) All leaders, regardless their institution’s current financial health, should implement a formal “rightsizing” program, incorporating a reassessment of their commitments and contributions to open educational access.
- (d) Leaders should provide for the necessary resources and expertise to move Oregon’s community colleges quickly and purposefully from a focus on *conventional* strategies to more extensive use and evaluation of *innovative* rightsizing strategies.

Discussion of Recommendations

The first recommendation is that all community college personnel should “tell the story” of open access and how they are working to maintain the open door policy. Theodore Roosevelt said that “It’s a sad frog who won’t croak for his own pond.” In contemporary terms, what Roosevelt was referring to is an element of “marketing.” Marketing is not selling. Marketing is a process of identifying a need, developing products or services to fill the need, pricing the products or services appropriately, promoting them properly, and distributing them to the end consumer (Markin, 1979, pp. 4-6). Community colleges have done yeomen’s work in most aspects of marketing, but have failed miserably at the promotional element. The “promotional mix” needs to include not only specific class offerings, but also “institutional” promotions. The community college successes need to be brought to the public’s attention. Information such as that coming out of this study needs to be shared. Community college leaders are acting responsibly in terms of the stated legislative goal of open access (ORS Chapter 341), and they are doing so in the face of mounting financial pressure. This needs to be shared with the public and policy makers.

A second recommendation to community college leaders is to increase staff development at all levels of the organization. It is paradoxical that most cuts are made in staff development at times when greater investments in people are actually needed to facilitate organizational change. This paradox is supported by behavior indicated in this study. The study concluded that

leaders are moving to more *innovative* strategies of reshaping the institution, developing quality and productivity incentives, reengineering processes, and building a “quality” culture. These are complex concepts, to say nothing of the practical details and dynamics necessary for their implementation. Yet, fully 42% (see Table 5) of the leaders indicated that they had cut professional development in the past and some 31% (see Table 24) indicated that they planned to cut it in the future.

A third recommendation to Oregon’s community college leaders is that they implement a formal rightsizing program. “Rightsizing” is a purposeful action or set of actions developed and implemented by operational leaders to respond to a changing environment. Accordingly, rightsizing refers to the broad array of organizational strategies available to operational leadership. It is not limited to merely retrenchment strategies, but encompasses additional ideas such as upsizing, downsizing, reengineering, reorganizing, restructuring, and reallocating. As Morris (1994) explains, “rightsizing is more often a sense of proportion or ratio than it is an absolute figure” (p. 46) and implies dynamic processes rather than a constant state. Rightsizing also involves long-term incremental and decremental adjustment of mission elements. Rightsizing is a concept of scale and equilibrium relative to institutional means. As such, this recommendation to formalize a rightsizing initiative is tendered to all community college leaders, regardless their institution’s current financial health.

Finally, a fourth recommendation to leaders is that they provide the resources and expertise necessary to move their institutions to *innovative* rightsizing strategies as soon as possible. There are generally two stages of rightsizing. First, short-term conventional strategies are implemented. These relate to enhancing revenues and reducing costs. Second, once conventional strategies have been exhausted or found insufficient to cope with the long-term outlook, more innovative strategies are implemented. Innovative strategies in this study were categorized as strategies to reengineer processes, to build a "quality" culture, to develop productivity incentives, and to reshape the institution. Organizational researchers have found it best to get past the first stage and into innovative strategies as quickly as possible (Behn, 1980, p. 615). This needs to be done *before* "organizational slack" has been eliminated (Cyert, 1978, 347). Organizational slack is important in that it permits greater possibilities for rightsizing options, helps balance the budget, and eases the transition to a new organizational equilibrium and philosophy.

Recommendations for Further Research

Based on study findings and conclusions and an extensive review of the literature of access and rightsizing, the following recommendations are made for further research.

Summary of Recommendations

- (a) This study should be replicated in this state as part of an ongoing longitudinal study, tracking trends and patterns.
- (b) This study should be replicated in other state community college systems, establishing “best practices” and nationwide benchmarks.
- (c) Research should be conducted to empirically examine the net impact on student access of the more extensively used rightsizing strategies.
- (d) The dynamics and phases of the rightsizing process need to be explored and documented relative to Oregon’s community colleges.
- (e) Research is needed to examine the economic impact of increasing or decreasing student educational access to Oregon’s community colleges.
- (f) Research is needed to develop an empirically based “College Accessibility Index.”

Discussion of Recommendations

This study should be replicated in this state every three to five years as part of an ongoing longitudinal study of community college leadership behavior. Such tracking and monitoring of rightsizing behavior relative to the mission of open access will be useful to both statewide policy makers and institutional leaders. These policy makers and leaders will be able to use such information for on-going strategic planning purposes.

This study should also be replicated in other states and might be modified for individual campus research. By using the procedures and instruments developed for this study, researchers would be able to evaluate the consistency of rightsizing behavior relative to open access for any community college system or campus. This would assist policy makers and operational leaders to assess where institutions are positioned relative to the important community college mission of open access.

A third recommendation for further research is to empirically examine the net impact on student access of the more extensively used rightsizing strategies. Currently, there is little such information available and none related to the Oregon community college environment. This information would be extremely valuable to leaders in their decision making processes to use or avoid using particular strategies.

A fourth recommendation for further research involves the use of the rightsizing taxonomy model presented in Figure 4. The dynamics and phases of this model need to be explored and documented relative to Oregon's community colleges. Studies establishing and tracking the movement of this state's community colleges into and out of the various "Conservative" and "Innovative" strategies would be extremely useful leadership information. Substantial literature suggests that an "opportunity cost" exists for colleges that spend too much time and effort in search of ways merely to increase revenues and reduce costs (i.e., "Conservative" strategies), without moving to more creative "Innovative" strategies. Certainly a part of this opportunity cost relates

to educational access of the community. This needs to be explored and documented in greater detail.

A fifth recommendation for research is to examine the economic impact of increasing or decreasing educational access to Oregon's community colleges. It has been well established that increased levels of education increase lifetime earnings. Given this, the research might examine how a gain or loss in student educational access translates into economic loss or gain in state income tax revenues. This research might be broadened to include how a gain or loss in student educational access translates into an Oregonian's ability or inability to purchase a median priced home and the related gain or loss to cities and counties in related property taxes.

A final recommendation for further research would be to develop a more empirically based "College Accessibility Index." This index might be best developed for use on a campus wide basis. In this way, each college could calculate its own index, possibly through the use of computer software, and use and monitor the index year-to-year. The results of this College Accessibility Index could be incorporated into the strategic planning process for each college. Ultimately, the individual College Accessibility Indices in a system could be combined, providing an overall, statewide index against which other state indices might be benchmarked.

Implications for Educational Practice

Summary of Implications

- (a) Community college practitioners and policy makers need to resurrect their passion and commitment to educational access for Oregonians.
- (b) Community college practitioners and policy makers need to have a firm understanding of how rightsizing actions impact student access.
- (c) Community college practitioners and policy makers need to promote the philosophy that education is a public good, benefiting all Oregonians.

Discussion of Implications

There appears to be three primary implications raised from this study for educational practice of Oregon's community colleges. All three share a common thread of professional development for both community college practitioners and policy makers.

Resurrecting the Passion and Commitment to Educational Access

Perhaps the greatest implication for professional practice related to this study is the need to resurrect the passion and commitment to the philosophy of educational access. There is little question that within the community college literature there is substantial support for the core value of open access.

Comments such as Leland Medsker's in 1960 are typical:

[The community college] is perhaps the most effective democratizing agent in higher education. It decentralizes post-high school opportunities by placing them within reach of a large number of students. It makes higher education available at a low cost to the student and at moderate cost to society (p. 4).

Oregon practitioners of community college education are keenly familiar with such language. The fact that all Oregon community colleges have formulated their college missions around the concept of open access provides additional philosophical support for the concept.

Despite the fact that student accessibility is a centerpiece of community college existence, it seems clear a resurrection of passion for the topic needs to be initiated. Community college leaders are complacent about the pragmatic aspects of open access. This was evidenced in this study by the increases in tuition, a primary barrier to educational access. Tuition is becoming viewed as merely another user fee, like an entrance fee to the state park.

In order to refocus efforts on open access, professionals need refreshing on the value of educational access to Oregonians and why it is such a critical factor differentiating community colleges from other institutions of higher education. Issues of open access need to be brought from the subconscious to conscious and, once again, made part of daily actions. This is particularly important now, in a time when senior college leaders are rapidly retiring, being replaced by new leaders. These new leaders have operated under different economic and political climates. Consequently they may not fully understand nor appreciate the history, value, and importance of the open access mission.

Professional development needs to be provided in these areas, so the new community college leadership will continue the vigilance against closing educational access to Oregonians.

Understanding the Rightsizing Impact on Open Access

The second implication for professional practice is a need for practitioners and policy makers to have a firm grasp of how rightsizing actions impact student access. A college's budget is the clearest expression of a college's priorities. Accordingly, educational leaders need to be well versed in budgetary issues and familiar with the repercussions of budgetary actions. Budgets are no longer the sole purview of business officers and controllers. All leadership must be budgetary fluent. This will become more critical as resources become more and more scarce.

Certainly, future studies similar to this one are needed to provide leaders with information on rightsizing choices. However, professional development of leadership is also needed in the concepts of efficiency and effectiveness and how various rightsizing strategies relate to these ideas. A beginning point in this educational process might be review of the rightsizing strategy taxonomy (Figure 4) and the related dynamics presented in Chapter 2 of this study.

Rightsizing an organization is increasingly a matter of what can be done with the money available; not just for higher education, but for all public

organizations. The idea of doing “more with less” is a short-term response to a changing environment. Eventually, less results in less. Community colleges are rapidly reaching some serious moments of truth, moments in which they will need to decide whether they can continue to let the mission creep, being all things to all people. The other extreme is to promote strict budgetary Darwinism, allowing only the economically fittest of programs to survive. On balance, perhaps the solution is in some form of boutiques of educational excellence, customized to the local community.

Although Oregon community college leaders appear to be managing to stave off wholesale closing of open access, if financial trends continue it seems inevitable restrictions will have to be made. The leader’s budgetary decisions will provide a clear insight into the values of community college leaders and the vision they hold for the future of the institution and Oregonians.

Promoting Education as a “Public Good”

A final implication of this study for community college practitioners and policy makers is the need to promote the philosophy that education is a public good, benefiting all Oregonians. Truett and Truett (1992) define a public good as “a product or service whose benefits cannot be limited to those who directly pay for it” (p. 632). National defense, public transportation, pollution free air, national parks, and police and fire protection are examples of public goods. Everyone benefits from such “goods.” Education is similarly a public good.

This concept of education as a public good was one of the founding philosophies of community colleges. Dr. Leonard Koos incorporated this philosophy into his development of the original Oregon community college plan, advocating that the colleges be "tuition free" (Koos, 1950, p. 1). The prevailing thinking of the time was that since the community was the primary beneficiary of an educated citizenry, it was only right and reasonable that (like other public goods) community colleges should be fully funded through public sources. In this way, their services could be made widely available at little or no direct cost to individual students (Pedersen, 1995, p. 3). It may seem strange now, but this was the general thinking of educators well into the seventies.

Today, as evidenced by data provided in this study, support for low tuition and, therefore, open access to the masses has waned. This is indicative of more than a mere change in the mix of public resources. It reflects a major shift in attitudes and values that allow such tuition increases to take place. The public and possibly college leaders, themselves, are being swayed by politicians that the benefits of an education are private and exclusive to the individual obtaining the education. Accordingly, the argument goes, it is the individual benefiting who should shoulder the cost and not the taxpaying public.

This country was not founded on such individualism. As the United States motto *e pluribus unum* ("from many, one") expresses, our's is a foundation of pluralism. Focusing on the mere benefits of an education to individuals, rather than on the greater betterment of "community," accomplishes

nothing but greater divisiveness. Community is strengthened by shared values of pluralism. Educational access is a pluralistic concept. Community college leaders and policy makers have a duty to promote education as a public good, keeping this valuable golden door open for all Oregonians.

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APPENDICES

**APPENDIX A
OREGON COMMUNITY COLLEGES
BY STUDENT FTE CATEGORIES**

Category I: Less than 1500 Student FTE

Clatsop Community College
1653 Jerome Avenue
Astoria, OR 97103-3698

Columbia Gorge Community College
300 E. 4th Street
The Dalles, OR 97058-2282

Oregon Coast Community College S.D.
332 S.W. Coast Highway
Newport, OR 97365-4928

Tillamook Bay Community College S.D.
6385 Tillamook Avenue
Bay City, OR 97107-9641

Category II: 1500 to 2499 Student FTE

Blue Mountain Community College
2410 N.W. Carden Avenue
P.O. Box 100
Pendleton, OR 97801-0100

Central Oregon Community College
2600 N.W. College Way
Bend, OR 97701-5998

Southwestern Oregon Community College
1988 Newmark
Coos Bay, OR 97420-2971

Treasure Valley Community College
650 College Boulevard
Ontario, OR 97914-3498

Category III: 2500 to 5499 Student FTE

Clackamas Community College
19600 S. Molalla Avenue
Oregon City, OR 97045-9049

Linn-Benton Community College
6500 S.W. Pacific Blvd.
Albany, OR 97321-3774

Rogue Community College
3345 Redwood Highway
Grants Pass, OR 97527-9298

Umpqua Community College
1140 College Road
P.O. Box 967
Roseburg, OR 97470-0226

Category IV: Greater than 5500 Student FTE

Chemeketa Community College
4000 Lancaster Dr. N.E.
P.O. Box 14007
Salem, OR 97309-7070

Lane Community College
4000 E. 30th Avenue
Eugene, OR 97405-0640

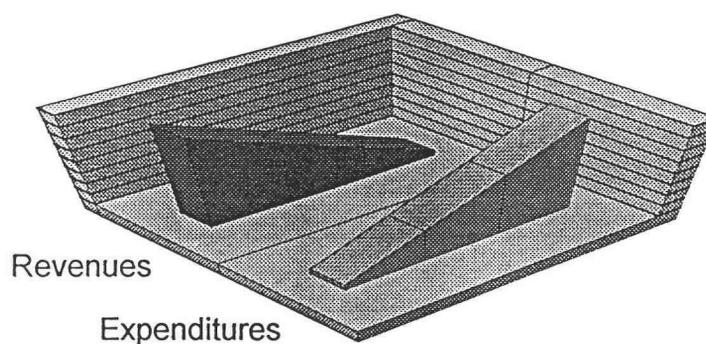
Mt. Hood Community College
26000 S.E. Stark Street
Gresham, OR 97030-3300

Portland Community College
12000 S.W. 49th Avenue
P.O. Box 19000
Portland, OR 97280-0990

APPENDIX B
STUDY INSTRUMENTATION

COPING WITH A CHANGING ENVIRONMENT

*A STATE SURVEY OF OREGON'S
COMMUNITY COLLEGES*



**Western Center for Community
College Development**

**COMMUNITY COLLEGE
LEADERSHIP PROGRAM
OREGON STATE UNIVERSITY**

OREGON COMMUNITY COLLEGE SURVEY

Part I -- List of Coping Strategies

Institutions are using a variety of strategies to operate more efficiently while preserving academic quality. A list of strategies is provided below. Please check **Two Boxes** for each strategy -- one for **Past Use** and one for **Future Use**. It is critical to the success of the study that each strategy is addressed in both past and future dimensions to the best of your knowledge. **Thank you for your help!!**

#	Strategy	#	Have Used	Have Not Used	Plan to Use	No Plan to Use
	Example: Reduce travel budget		√		√	
1	Reduce funding for student services.	1				
2	Reduce travel budgets.	2				
3	Reduce custodial services.	3				
4	Reduce number of support staff positions.	4				
5	Provide mechanisms for ongoing customer feedback.	5				
6	Reengineer work tasks.	6				
7	Defer equipment purchases.	7				
8	Communicate with business/industry regarding budget constraints.	8				
9	Reduce secretarial services.	9				
10	Reduce developmental and adult basic education programs.	10				
11	Perform cost analysis before strategy implementation.	11				
12	Cultivate alternative funding sources.	12				
13	Reduce non-traditional programs or courses.	13				
14	Increase reliance on technology in student services areas.	14				
15	Increase reliance on technology in teaching and learning.	15				
16	Increase tuition.	16				
17	Reallocate positions when they become available.	17				
18	Eliminate or reduce bulk mailings.	18				
19	Reduce number of administrative positions.	19				
20	Involve staff in strategy suggestions for budgetary constraints.	20				

#	Strategy	#	Have Used	Have Not Used	Plan to Use	No Plan to Use
21	Initiate a hiring freeze.	21				
22	Increase reliance on technology in administrative functions.	22				
23	Maintain trends and projections on important effectiveness variables for management decision making.	23				
24	Reduce number of faculty positions.	24				
25	Reduce library hours.	25				
26	Utilize institutional planning committee for budgetary constraints.	26				
27	Reduce staffing in student services.	27				
28	Conduct mission-based reviews of academic areas.	28				
29	Encourage institutional focus on the customer.	29				
30	Initiate across-the-board cuts.	30				
31	Assess quality of academic programs.	31				
32	Increase fund-raising and development efforts.	32				
33	Limit institutional enrollment.	33				
34	Build formal partnerships with four-year colleges.	34				
35	Conduct mission-based reviews of administrative areas.	35				
36	Reduce summer school expenditures.	36				
37	Communicate with students regarding budget constraints.	37				
38	Defer facility and equipment maintenance.	38				
39	Reduce funding for library.	39				
40	Build formal partnerships with business and industry.	40				
41	Reduce the scope of activities of the institution.	41				
42	Reduce funds for professional development.	42				
43	Limit enrollment in certain programs.	43				
44	Offer new courses based on high demand.	44				
45	Conduct mission-based reviews of support areas.	45				
46	Reduce staffing in library services.	46				
47	Involve students in strategy suggestions for budgetary constraints.	47				
48	Increase staff development.	48				
49	Contract out services previously provided internally.	49				
50	Assess quality of support programs.	50				

#	Strategy	#	Have Used	Have Not Used	Plan to Use	No Plan to Use
51	Evaluate institutional mission as it relates to effectiveness.	51				
52	Reduce number of part-time positions.	52				
53	Initiate or increase parking fees.	53				
54	Increase student fees.	54				
55	Build formal partnerships with other community colleges.	55				
56	Reduce positions through attrition.	56				
57	Reduce off-campus credit programs.	57				
58	Reduce administrative costs.	58				
59	Encourage sabbatical leaves without pay.	59				
60	Encourage the use of carry-over funds.	60				
61	Increase institutional enrollment.	61				
62	Increase the use of adjunct faculty.	62				
63	Reduce weekend programs and classes.	63				
64	Implement early retirement incentive programs.	64				
65	Utilize ad hoc committee for management of budgetary constraints.	65				
66	Implement Total Quality Management concepts.	66				
67	Involve faculty in strategy suggestions for budgetary constraints.	67				
68	Emphasize teamwork across departments.	68				
69	Communicate with general public regarding budget constraints.	69				
70	Increase student/faculty ratios.	70				
71	Encourage development of new credit programs.	71				
72	Build formal partnerships with high schools.	72				
73	Reduce positions through layoffs.	73				
74	Conduct enrollment management studies.	74				
75	Evaluate management for budgetary constraints on quality.	75				
76	Communicate with faculty regarding budget constraints.	76				
77	Revise institutional role and mission.	77				
78	Reduce funds for telephone expenditures.	78				
79	Communicate with staff regarding budget constraints.	79				
80	Reduce funds for copying expenditures.	80				

Part II -- Alternative Coping Strategies

Please list other coping strategies we have not mentioned you are currently using or would consider using:

- 1. _____

- 2. _____

- 3. _____

General Comments:

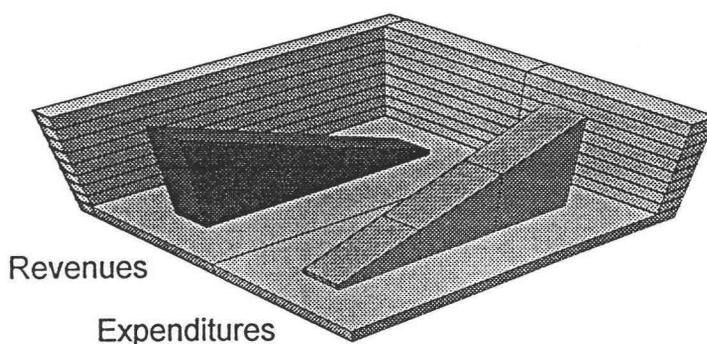
Please return this survey instrument in the stamped envelope provided to:

Anthony E. Beebe
Oregon State Community College
Survey Administrator
19894 SW Celebrity
Aloha, Oregon 97007

THANKS AGAIN FOR YOUR HELP AND PARTICIPATION!!

COPING WITH A CHANGING ENVIRONMENT:

***A RATING OF STRATEGIES RELATIVE
TO THEIR IMPACT ON
EDUCATIONAL ACCESS***



**Western Center for Community
College Development**

**COMMUNITY COLLEGE
LEADERSHIP PROGRAM
OREGON STATE UNIVERSITY**

OREGON COMMUNITY COLLEGE SURVEY

Rating of Coping Strategies Relative to Direct Impact on Access.

Institutions are using a variety of strategies to operate more efficiently while preserving academic quality. Some of these strategies can have a direct impact on the adult learner's access to educational opportunity. Below is a list of strategies institutions have been using to cope with the changing environment. Using the associated scale, circle the symbol in the column best reflecting your professional assessment of the strategy's direct impact on educational access. Please note that the study is not interested in testing your knowledge of the research in this area, but rather in collecting your professional assessment of the strategies based on your personal feelings and experiences. It is critical to the success of the study that each strategy is rated on the scale. *Thank you for your help!*

#	Strategy	Substantial Direct Negative Impact on Access	Moderate Direct Negative Impact on Access	No or Minor Direct Impact on Access	Moderate Direct Positive Impact on Access	Substantial Direct Positive Impact on Access
	Example: Reduce travel budget	--	-	∅	+	++
1	Reduce funding for student services.	--	-	∅	+	++
2	Reduce travel budgets.	--	-	∅	+	++
3	Reduce custodial services.	--	-	∅	+	++
4	Reduce number of support staff positions.	--	-	∅	+	++
5	Provide mechanisms for ongoing customer feedback.	--	-	∅	+	++
6	Reengineer work tasks.	--	-	∅	+	++
7	Defer equipment purchases.	--	-	∅	+	++
8	Communicate with business/industry regarding budget constraints.	--	-	∅	+	++
9	Reduce secretarial services.	--	-	∅	+	++
10	Reduce developmental and adult basic education programs.	--	-	∅	+	++
11	Perform cost analysis before strategy implementation.	--	-	∅	+	++
12	Cultivate alternative funding sources.	--	-	∅	+	++
13	Reduce non-traditional programs or courses.	--	-	∅	+	++
14	Increase reliance on technology in student services areas.	--	-	∅	+	++
15	Increase reliance on technology in teaching and learning.	--	-	∅	+	++
16	Increase tuition.	--	-	∅	+	++
17	Reallocate positions when they become available.	--	-	∅	+	++
18	Eliminate or reduce bulk mailings.	--	-	∅	+	++
19	Reduce number of administrative positions.	--	-	∅	+	++
20	Involve staff in strategy suggestions for budgetary constraints.	--	-	∅	+	++

#	Strategy	Substantial Direct Negative Impact on Access	Moderate Direct Negative Impact on Access	No or Minor Direct Impact on Access	Moderate Direct Positive Impact on Access	Substantial Direct Positive Impact on Access
21	Initiate a hiring freeze.	--	-	∅	+	++
22	Increase reliance on technology in administrative functions.	--	-	∅	+	++
23	Maintain trends and projections on important effectiveness variables for management decision making.	--	-	∅	+	++
24	Reduce number of faculty positions.	--	-	∅	+	++
25	Reduce library hours.	--	-	∅	+	++
26	Utilize institutional planning committee for budgetary constraints.	--	-	∅	+	++
27	Reduce staffing in student services.	--	-	∅	+	++
28	Conduct mission-based reviews of academic areas.	--	-	∅	+	++
29	Encourage institutional focus on the customer.	--	-	∅	+	++
30	Initiate across-the-board cuts.	--	-	∅	+	++
31	Assess quality of academic programs.	--	-	∅	+	++
32	Increase fund-raising and development efforts.	--	-	∅	+	++
33	Limit institutional enrollment.	--	-	∅	+	++
34	Build formal partnerships with four-year colleges.	--	-	∅	+	++
35	Conduct mission-based reviews of administrative areas.	--	-	∅	+	++
36	Reduce summer school expenditures.	--	-	∅	+	++
37	Communicate with students regarding budget constraints.	--	-	∅	+	++
38	Defer facility and equipment maintenance.	--	-	∅	+	++
39	Reduce funding for library.	--	-	∅	+	++
40	Build formal partnerships with business and industry.	--	-	∅	+	++
41	Reduce the scope of activities of the institution.	--	-	∅	+	++
42	Reduce funds for professional development.	--	-	∅	+	++
43	Limit enrollment in certain programs.	--	-	∅	+	++
44	Offer new courses based on high demand.	--	-	∅	+	++
45	Conduct mission-based reviews of support areas.	--	-	∅	+	++
46	Reduce staffing in library services.	--	-	∅	+	++
47	Involve students in strategy suggestions for budgetary constraints.	--	-	∅	+	++
48	Increase staff development.	--	-	∅	+	++
49	Contract out services previously provided internally.	--	-	∅	+	++
50	Assess quality of support programs.	--	-	∅	+	++

#	Strategy	Substantial Direct Negative Impact on Access	Moderate Direct Negative Impact on Access	No or Minor Direct Impact on Access	Moderate Direct Positive Impact on Access	Substantial Direct Positive Impact on Access
51	Evaluate institutional mission as it relates to effectiveness.	--	-	Ø	+	++
52	Reduce number of part-time positions.	--	-	Ø	+	++
53	Initiate or increase parking fees.	--	-	Ø	+	++
54	Increase student fees.	--	-	Ø	+	++
55	Build formal partnerships with other community colleges.	--	-	Ø	+	++
56	Reduce positions through attrition.	--	-	Ø	+	++
57	Reduce off-campus credit programs.	--	-	Ø	+	++
58	Reduce administrative costs.	--	-	Ø	+	++
59	Encourage sabbatical leaves without pay.	--	-	Ø	+	++
60	Encourage the use of carry-over funds.	--	-	Ø	+	++
61	Increase institutional enrollment.	--	-	Ø	+	++
62	Increase the use of adjunct faculty.	--	-	Ø	+	++
63	Reduce weekend programs and classes.	--	-	Ø	+	++
64	Implement early retirement incentive programs.	--	-	Ø	+	++
65	Utilize ad hoc committee for management of budgetary constraints.	--	-	Ø	+	++
66	Implement Total Quality Management concepts.	--	-	Ø	+	++
67	Involve faculty in strategy suggestions for budgetary constraints.	--	-	Ø	+	++
68	Emphasize teamwork across departments.	--	-	Ø	+	++
69	Communicate with general public regarding budget constraints.	--	-	Ø	+	++
70	Increase student/faculty ratios.	--	-	Ø	+	++
71	Encourage development of new credit programs.	--	-	Ø	+	++
72	Build formal partnerships with high schools.	--	-	Ø	+	++
73	Reduce positions through layoffs.	--	-	Ø	+	++
74	Conduct enrollment management studies.	--	-	Ø	+	++
75	Evaluate management for budgetary constraints on quality.	--	-	Ø	+	++
76	Communicate with faculty regarding budget constraints.	--	-	Ø	+	++
77	Revise institutional role and mission.	--	-	Ø	+	++
78	Reduce funds for telephone expenditures.	--	-	Ø	+	++
79	Communicate with staff regarding budget constraints.	--	-	Ø	+	++
80	Reduce funds for copying expenditures.	--	-	Ø	+	++
81	Increase distance learning programs.	--	-	Ø	+	++
82	Establish venture fund to enhance enrollments.	--	-	Ø	+	++

*Please return this survey in the self-addressed stamped
enveloped provided to:*

*Anthony E. Beebe, Survey Administrator
Oregon Community College Survey
19894 SW Celebrity
Aloha, Oregon 97007*

Thanks again for your help!!

**APPENDIX C:
STUDY CORRESPONDENCE**

Survey Cover Letter

August 1, 1995

Dear (leader):

Three leaders from each of Oregon's 16 community colleges have been selected to take part in an important statewide survey: "Coping with a Changing Environment." I realize the survey is coming to you at a busy time. However, your participation could benefit your institution and the community colleges of Oregon.

The goal of the survey is to inventory coping strategies community college leaders have used and contemplate using to deal with the changing environment. The survey results will be used as input into a summary analysis. As such, no individual or institutional data will be reported. A summary report of this analysis will be made available as soon as survey data can be tallied. If you are interested in receiving a report, simply include your business card when you return the completed survey instrument in the enclosed postage-paid return envelope.

On behalf of the Western Center, I want to thank you for taking the 10 minutes or so to complete this important survey. Your response is highly valued, and because of the small sample size, absolutely critical to the project success.

Please call me if you have any questions. Again, thank you for your participation at this busy time.

Best regards,

Anthony E. Beebe, Ed.D. Candidate
Oregon State University

Survey Follow-Up Letter

August 21, 1995

Dear (leader):

About a three weeks ago you should have received an Oregon community college survey, "Coping with a Changing Environment." No doubt it may have been lost getting to you.

In any case, to present statewide conclusions, I very much need your response to the survey. It will only take ten minutes or so to complete and may benefit us all. No institutional data will be reported, only summarized information of various college size categories. I am sending another copy of the survey and a postage-paid, return envelope for your convenience. Please complete and return it as soon as you can.

Thank you in advance for helping with this important project. Because of the small sample size, your response is highly valued and critical to project success.

Best regards,

Anthony E. Beebe, Ed.D. Candidate
Oregon State University

APPENDIX D
LISTS OF PAST AND PLANNED STRATEGIES WITH
ASSOCIATED ACCESS INDICES

List of Past Strategies Used

#	Strategy	Freq. Use	% Use	Access Index
1	Communicate with staff regarding budget constraints.	48	100%	25%
2	Communicate with faculty regarding budget constraints.	47	98%	42%
3	Increase tuition.	47	98%	-92%
4	Emphasize teamwork across departments.	45	94%	67%
5	Involve staff in strategy suggestions for budgetary constraints.	45	94%	33%
6	Build formal partnerships with business and industry.	44	92%	33%
7	Build formal partnerships with high schools.	44	92%	58%
8	Encourage institutional focus on the customer.	44	92%	42%
9	Reallocate positions when they become available.	44	92%	25%
10	Increase institutional enrollment.	43	90%	83%
11	Reduce positions through attrition.	43	90%	8%
12	Cultivate alternative funding sources.	42	88%	50%
13	Offer new courses based on high demand.	42	88%	58%
14	Perform cost analysis before strategy implementation.	42	88%	25%
15	Reduce administrative costs.	42	88%	17%
16	Encourage development of new credit programs.	41	85%	50%
17	Involve faculty in strategy suggestions for budgetary constraints.	41	85%	42%
18	Assess quality of academic programs.	40	83%	42%
19	Communicate with general public regarding budget constraints.	40	83%	33%
20	Defer equipment purchases.	40	83%	-50%
21	Increase reliance on technology in administrative functions.	40	83%	33%
22	Reengineer work processes.	40	83%	25%
23	Increase fund-raising and development efforts.	39	81%	67%
24	Increase student fees.	38	79%	-58%
25	Assess quality of support programs.	37	77%	42%
26	Communicate with business/industry regarding budget	37	77%	8%
27	Evaluate institutional mission as it relates to effectiveness.	37	77%	33%
28	Reduce number of administrative positions.	37	77%	-8%
29	Conduct mission-based reviews of academic areas.	36	75%	25%
30	Build formal partnerships with four-year colleges.	35	73%	50%

List of Past Strategies, Continues

List of Past Strategies, Continued

#	Strategy	Freq. Use	% Use	Access Index
31	Build formal partnerships with other community colleges.	35	73%	50%
32	Communicate with students regarding budget constraints.	35	73%	8%
33	Increase reliance on technology in teaching and learning.	35	73%	50%
34	Reduce number of support staff positions.	35	73%	-33%
35	Defer facility and equipment maintenance.	34	71%	-33%
36	Increase reliance on technology in student services areas.	34	71%	0%
37	Provide mechanisms for ongoing customer feedback.	34	71%	25%
38	Reduce travel budgets.	34	71%	-17%
39	Conduct mission-based reviews of support areas.	33	69%	33%
40	Implement Total Quality Management concepts.	33	69%	50%
41	Increase the use of adjunct faculty.	33	69%	17%
42	Reduce staffing in student services.	33	69%	-67%
43	Conduct enrollment management studies.	32	67%	42%
44	Encourage the use of carry-over funds.	32	67%	42%
45	Maintain trends and projections for management decision making.	32	67%	42%
46	Utilize institutional planning committee for budgetary constraints.	32	67%	17%
47	Reduce secretarial services.	31	65%	-25%
48	Implement early retirement incentive programs.	30	63%	25%
49	Conduct mission-based reviews of administrative areas.	28	58%	33%
50	Initiate across-the-board cuts.	28	58%	-58%
51	Limit enrollment in certain programs.	28	58%	-25%
52	Reduce funding for student services.	28	58%	-67%
53	Revise institutional role and mission.	28	58%	33%
54	Contract out services previously provided internally.	27	56%	0%
55	Increase student/faculty ratios.	27	56%	17%
56	Initiate a hiring freeze.	27	56%	-33%
57	Increase staff development.	26	54%	33%
58	Involve students in strategy suggestions for budgetary constrains.	26	54%	42%
59	Reduce number of part-time positions.	26	54%	-50%
60	Reduce positions through layoffs.	25	52%	-42%
61	Reduce custodial services.	24	50%	-8%
62	Reduce funds for copying expenditures.	24	50%	-17%
63	Reduce number of faculty positions.	24	50%	-83%
64	Eliminate or reduce bulk mailings.	23	48%	-17%
65	Utilize ad hoc committee for management of budgetary	23	48%	17%

List of Past Strategies, Continues

List of Past Strategies, Continued

#	Strategy	Freq. Use	% Use	Access Index
66	Reduce summer schools expenditures.	21	44%	-58%
67	Reduce funds for professional development.	20	42%	-33%
68	Reduce non-traditional programs or courses.	20	42%	-58%
69	Evaluate management for budgetary constraints on quality.	19	40%	33%
70	Reduce the scope of activities of the institution.	19	40%	-25%
71	Reduce funds for telephone expenditures.	18	38%	-25%
72	Reduce funding for library.	15	31%	-50%
73	Reduce library hours.	14	29%	-58%
74	Reduce staffing in library services.	13	27%	-42%
75	Initiate or increase parking fees.	9	19%	-33%
76	Reduce developmental and adult basic education programs.	9	19%	-33%
77	Encourage sabbatical leaves without pay.	8	17%	25%
78	Reduce weekend programs and classes.	7	15%	-42%
79	Limit institutional enrollment.	5	10%	-50%
80	Reduce off-campus credit programs.	4	8%	-50%

List of Strategies Planned for Use

#	Strategy	Freq. Use	% Use	Access Index
1	Build formal partnerships with business and industry.	48	100%	33%
2	Communicate with faculty regarding budget constraints.	48	100%	42%
3	Communicate with staff regarding budget constraints.	48	100%	25%
4	Increase fund-raising and development efforts.	48	100%	67%
5	Cultivate alternative funding sources.	47	98%	50%
6	Increase institutional enrollment.	47	98%	83%
7	Involve staff in strategy suggestions for budgetary constraints.	47	98%	33%
8	Offer new courses based on high demand.	47	98%	58%
9	Assess quality of academic programs.	46	96%	42%
10	Build formal partnerships with high schools.	46	96%	58%
11	Emphasize teamwork across departments.	46	96%	67%
12	Encourage institutional focus on the customer.	46	96%	42%
13	Increase reliance on technology in administrative functions.	46	96%	33%
14	Increase tuition.	46	96%	-92%
15	Assess quality of support programs.	45	94%	42%

List of Strategies Planned for Use, Continues

List of Strategies Planned for Use, Continued

#	Strategy	Freq. Use	% Use	Access Index
16	Communicate with business/industry regarding budget constraints.	45	94%	8%
17	Conduct mission-based reviews of academic areas.	45	94%	25%
18	Evaluate institutional mission as it relates to effectiveness.	45	94%	33%
19	Increase reliance on technology in teaching and learning.	45	94%	50%
20	Involve faculty in strategy suggestions for budgetary constraints.	45	94%	42%
21	Perform cost analysis before strategy implementation.	45	94%	25%
22	Reallocate positions when they become available.	44	92%	25%
23	Reengineer work processes.	44	92%	25%
24	Encourage development of new credit programs.	43	90%	50%
25	Provide mechanisms for ongoing customer feedback.	43	90%	25%
26	Reduce administrative costs.	43	90%	17%
27	Communicate with general public regarding budget constraints.	42	88%	33%
28	Increase reliance on technology in student services areas.	42	88%	0%
29	Build formal partnerships with four-year colleges.	41	85%	50%
30	Maintain trends and projections for management decision making.	40	83%	42%
31	Communicate with students regarding budget constraints.	39	81%	8%
32	Conduct enrollment management studies.	39	81%	42%
33	Conduct mission-based reviews of administrative areas.	39	81%	33%
34	Conduct mission-based reviews of support areas.	39	81%	33%
35	Build formal partnerships with other community colleges.	37	77%	50%
36	Reduce positions through attrition.	37	77%	8%
37	Encourage the use of carry-over funds.	35	73%	42%
38	Implement Total Quality Management concepts.	34	71%	50%
39	Utilize institutional planning committee for budgetary constraints.	34	71%	17%
40	Defer equipment purchases.	32	67%	-50%
41	Increase student fees.	32	67%	-58%
42	Increase the use of adjunct faculty.	32	67%	17%
43	Reduce travel budgets.	32	67%	-17%
44	Contract out services previously provided internally.	31	65%	0%
45	Limit enrollment in certain programs.	30	63%	-25%
46	Reduce number of support staff positions.	30	63%	-33%
47	Increase staff development.	29	60%	33%
48	Involve students in strategy suggestions for budgetary constrains.	29	60%	42%
49	Increase student/faculty ratios.	28	58%	17%
50	Reduce number of administrative positions.	26	54%	-8%

List of Strategies Planned for Use, Continues

List of Strategies Planned for Use, Continued

#	Strategy	Freq. Use	% Use	Access Index
51	Revise institutional role and mission.	26	54%	33%
52	Evaluate management for budgetary constraints on quality.	25	52%	33%
53	Reduce the scope of activities of the institution.	25	52%	-25%
54	Implement early retirement incentive programs.	24	50%	25%
55	Reduce number of part-time positions.	23	48%	-50%
56	Utilize ad hoc committee for management of budgetary	23	48%	17%
57	Defer facility and equipment maintenance.	22	46%	-33%
58	Initiate a hiring freeze.	22	46%	-33%
59	Reduce funds for copying expenditures.	22	46%	-17%
60	Eliminate or reduce bulk mailings.	21	44%	-17%
61	Reduce non-traditional programs or courses.	20	42%	-58%
62	Reduce secretarial services.	20	42%	-25%
63	Reduce summer schools expenditures.	20	42%	-58%
64	Reduce custodial services.	19	40%	-8%
65	Reduce funding for student services.	19	40%	-67%
66	Reduce number of faculty positions.	19	40%	-83%
67	Initiate across-the-board cuts.	17	35%	-58%
68	Reduce funds for telephone expenditures.	16	33%	-25%
69	Reduce staffing in student services.	16	33%	-67%
70	Reduce funds for professional development.	15	31%	-33%
71	Initiate or increase parking fees.	13	27%	-33%
72	Reduce positions through layoffs.	13	27%	-42%
73	Reduce developmental and adult basic education programs.	10	21%	-33%
74	Reduce funding for library.	9	19%	-50%
75	Encourage sabbatical leaves without pay.	7	15%	25%
76	Reduce library hours.	7	15%	-58%
77	Reduce staffing in library services.	6	13%	-42%
78	Limit institutional enrollment.	3	6%	-50%
79	Reduce off-campus credit programs.	3	6%	-50%
80	Reduce weekend programs and classes.	3	6%	-42%