

# Community College Financing: Equity, Efficiency, and Accountability

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Community colleges are the gateway to higher education for many students with low social or economic status. The public two-year sector enrolled more than seven million of the 18.6 million U.S. undergraduates in Fall 2011; 51.6 percent of public college and university undergraduate enrollments.<sup>1</sup> Community colleges were founded and rapidly expanded in the 1960s and the 1970s

to “democratize” higher education by admitting previously excluded groups, such as low-income families and minoritized racial and ethnic communities.<sup>2</sup> Today there are 1,081 community colleges in the 50 states.<sup>3</sup>

The democratizing role continues. Often founded near dense population areas, they attract many commuters. Unlike traditional-age students at residential four-year colleges,

most community college students enroll part-time while attending to responsibilities at home, work, and school. They are as likely to pay their way through college rather than to assume debt or receive scholarships. Black and Hispanic students are more likely to enroll at these colleges than at four-year public universities. White and Asian undergraduates enroll in two-year and four-year institutions in nearly equal numbers.<sup>4</sup>

Community colleges desired large enrollments because of their mission to increase access and because states and localities based funding formulas on enrollments. To minimize costs to students, the colleges kept fees low, relative to university tuition. They devoted categorical funds to special advising, counseling, and academic support centers.

Fiscal pressures now limit the ability of community colleges to promote social equity and educational opportunity.<sup>5</sup> Worries about academic quality are stirred by low rates of progress from developmental or remedial courses to degree credit-bearing programs, by low associate's degree and certificate completion rates, and by low rates of transfer to four-year institutions.<sup>6</sup> Gaps in success rates among racial and ethnic groups also point to inequitable educational experiences and to stratified resources benefiting students with better academic preparation.<sup>7</sup> The national "college completion agenda," led by the Obama administration and philanthropic organizations, focuses on institutional effectiveness in producing graduates.<sup>8</sup>

Disquiet surrounding bureaucratic inefficiencies accompanies economic and quality concerns. Neoliberal and market-oriented philosophies led to expectations that public institutions serve the public good efficiently.<sup>9</sup> Higher education came under close scrutiny for its stewardship of public dollars. Drawing on private sector management concepts, legislators and higher education system leaders sought to use finance to promote administrative efficiencies, market-oriented entrepreneurship, academic productivity, and public accountability. Viewing individuals as consumers or

as employers needing workers, not as citizens, critics called for basing assessments of colleges on outputs (graduates and degrees), not on inputs (enrollments). The failure of most early performance funding models to achieve institutional efficiency or accountability led to current experimentation.<sup>10</sup>

Opinions differ as to whether these quality concerns stem from lack of adequate funding or from the inherent inability of public institutions to deliver goods and services as efficiently as the private sector. In any case, anti-tax sentiment, the Great Recession, and intense pressure on state and federal budgets continue to restrain public college and university budgets.<sup>11</sup> These restraints affect students at community colleges more than their peers at public and not-for-profit universities. Four states with bleak prospects for increased funding—California, Texas, Florida, and New York—account for more than one-third of community college students. California, with its severe budget cuts, enrolls about one in five.<sup>12</sup> Acknowledging that students are being turned away from the classes they need, the state adopted policies to ration access to community colleges.<sup>13</sup>

This chapter assesses the capacity of the community college finance system to promote the public good through equity, efficiency, and accountability. It identifies the funding streams that sustain community colleges, including federal, state, local governments, and student tuition and fees. It provides a framework for community college stakeholders to assess the design and consequences of finance strategies, and to navigate between equity and efficiency goals. The standard for assessment is promoting the public good.

The first section describes the funding sources for community colleges. It notes the share of funding from each source, and explains how the revenues are spent. The section draws on the tables of college revenues and expenditures compiled by the U.S. Department of Education from the Integrated Postsecondary Education Data System (IPEDS).<sup>14</sup> The section

then analyzes IPEDS enrollment and finance data to explain variations in state financing of community colleges.<sup>15</sup>

The next section discusses equity, efficiency, and accountability in community college financing. Each concept has multiple meanings. Subsections, therefore, contrast horizontal and vertical equity, technical and economic efficiency, and bureaucratic, market, and professional accountability. These abstract, technical terms convey political and ideological messages to the public. We discuss funding streams designed to promote each goal, and note where the mode of funding or student characteristics compromise those goals.

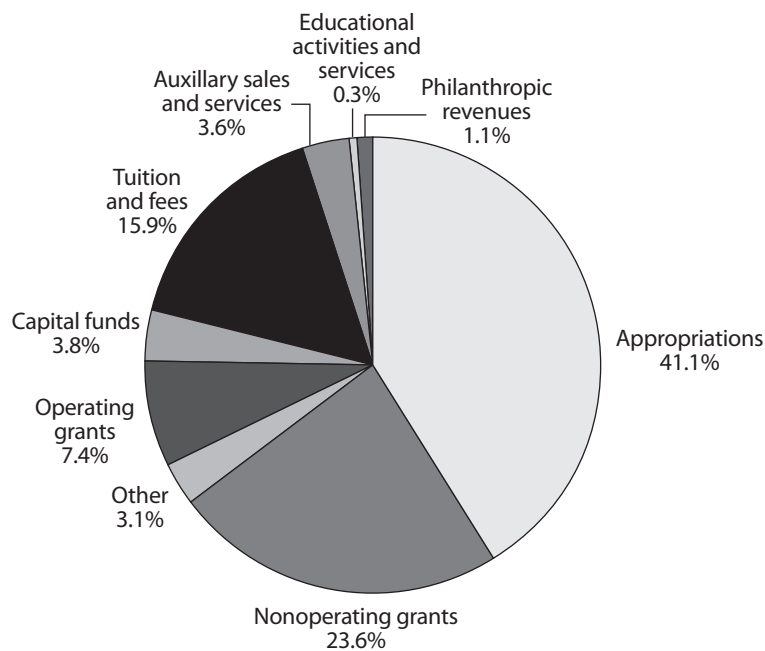
Many stakeholders still value equity as a financing goal, but public discourse and accountability concerns have shifted towards market-like language and funding mechanisms. Conceptualizing and measuring professional accountability for the equitable *and* efficient use of resources, we conclude, will restore balance in the aims of public investments.

## SOURCES AND SHARES OF REVENUE

**Government appropriations.** State and local government appropriations are the largest funding sources for community colleges—41.1 percent of total revenues nationwide in fiscal year (FY) 2011 (Figure 1).<sup>16</sup> States which appropriated funds to all community colleges, provided nearly \$14.4 billion dollars—24.4 percent of total revenues—to this sector. Variation occurs by location; the revenue share contributed by state appropriations is greater at rural colleges (33 percent of total revenues) than at urban and suburban community colleges (30 percent and 28 percent, respectively).<sup>17</sup> Community colleges in 27 states also receive appropriations from local governments—a virtually unique source among postsecondary institutions.<sup>18</sup> Local governments invested slightly over \$9.66 billion in FY 2011—16.5 percent of total community college revenues and 22.3 percent of revenues received by colleges in states with local funding.<sup>19</sup>

State and local governments also provide capital funds for buildings and physical plant

**Figure 1. Revenue Sources for Community Colleges: FY 2011**



Source: Authors' summary of Knapp, Kelly-Reid, and Ginder 2012a, 6-8, table 2.

Note: Percentages are subject to rounding error.

improvements. These funds amounted to only 3.8 percent of community college revenues in FY 2011; 43 percent of all community colleges (n=464) reported no capital appropriations in that year.<sup>20</sup> Infrastructure investments are cyclical, but the large proportion of colleges reporting no capital investments in FY 2011 reflects hard economic times, decreased spending on higher education, and growing interest in replacing brick and mortar campuses with on-line courses.

Government grants are the second largest source of funds. Federal and state non-operating grants contributed 23.6 percent of total revenues in FY 2011. Federal financial aid, administered under Title IV of the Higher Education Act (HEA), contributed nearly the entire amount (21.5 percent), mostly through its Pell Grant program for student financial aid (Figure 1, “nonoperating grants”). The Obama administration substantially increased spending on Pell Grants by broadening eligibility criteria and increasing award amounts.<sup>21</sup>

Operating grants, in contrast, are provided by the federal and state governments in return for completing a project or service. These grants provided 7.4 percent of total revenues in combination. Federal programs include Strengthening Institutions grants (Title III of HEA) and Hispanic Serving Institutions (HSIs) grants (Title V of HEA).

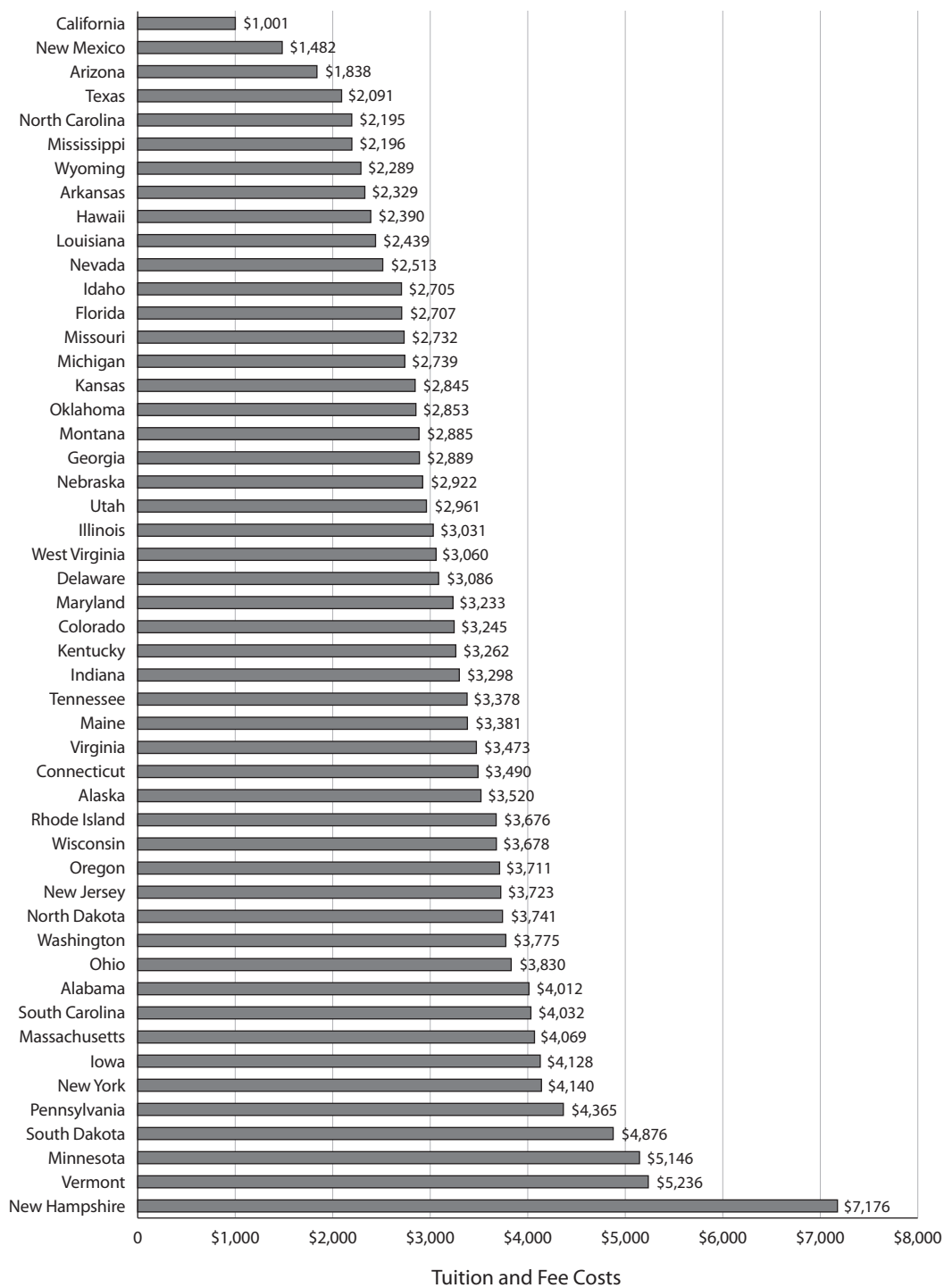
Direct payments come from tuition and fees, gifts, contributions to college endowments, and auxiliary service purchases—at bookstores and dining halls, for example.<sup>22</sup> Tuition and fees provide the largest share of direct payments: 15.9 percent of total revenues.<sup>23</sup> Auxiliary sales and services provide 3.6 percent, and educational activities and services offer a mere 0.3 percent (Figure 1).<sup>24</sup> Philanthropic revenues—including gifts, investment income, and additions to endowments—amounted to slightly over one percent. Figure 1 categorizes smaller funding streams—only 3.1 percent in FY 2011—as “other.”<sup>25</sup>

**Tuition and required fees.** Tuition and fees vary by state, but these charges are everywhere a significant source of community college funding. Tuition and required fees charged to full-time equivalent (FTE) students in 2011–12 ranged from \$1,000 in California to \$7,176 in New Hampshire (Figure 2).<sup>26</sup> Given this extreme variation, it is useful to note the median and interquartile range. At the median, tuition and fees hovered nationally around \$3,000. Not accounting for grants and fee waivers, 25 percent of community college students incurred annual charges of \$2,092 or less and 75 percent, in total, faced charges of \$3,634 or less. Thus, half of the colleges charged between about \$2,000 and \$3,600 per year.

Most states increased tuition in recent years: 104 percent in California from 2007–08 to 2012–13. Some states held the line. Inflation-adjusted tuition and fees in Maine decreased by three percent during the same period.<sup>27</sup> But in-state tuition and required fees for community college students increased by about \$250 (8.0 percent) from 2009–10 to 2011–12. The increase for out-of-state students was \$340 (5.2 percent).<sup>28</sup> In-district charges for local students averaged almost \$500 less than charges for in-state students nationally in 2011–12. But “in-district” tuition rates recorded the greater proportional jump—about \$250 (9.8 percent) between 2009–10 and 2011–12.<sup>29</sup>

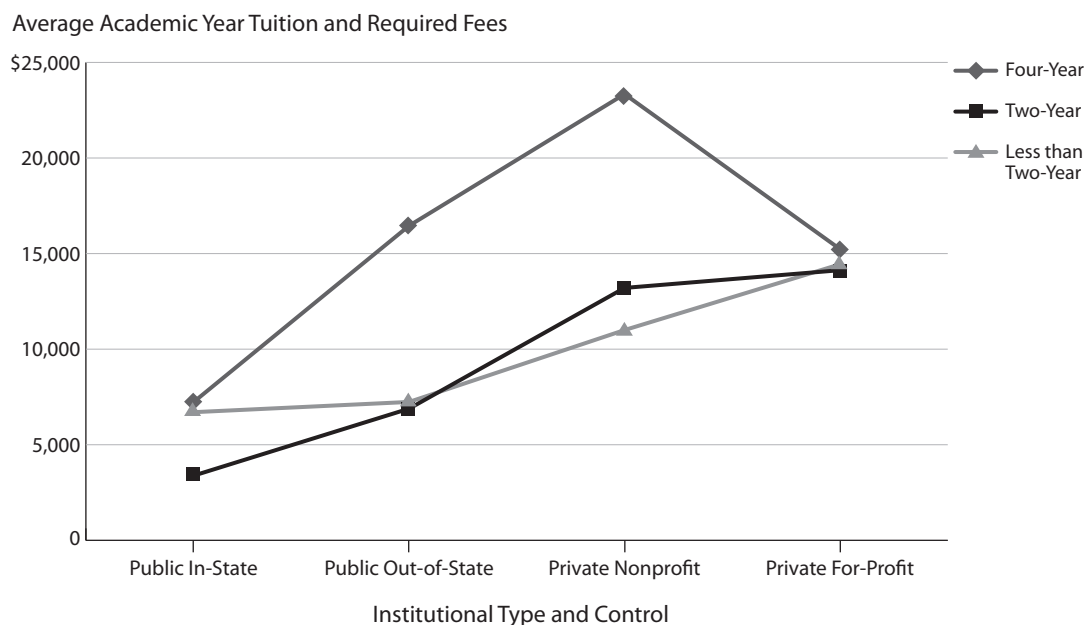
Tuition charges at community colleges are still relatively low; most public universities showed greater amounts and increases. Figure 3 shows tuition and fees by sector in 2011–12. It distinguishes between the amounts charged to in-state and out-of-state students.<sup>30</sup> Nationally, in-state tuition rates at community colleges averaged \$3,384—less than half of the \$7,234 average at public four-year institutions and a fraction of the average cost at private, four-year nonprofit institutions (\$23,343). Charges at private, for-profit colleges offering two-year degrees and certificates averaged \$14,131—four times greater than community college tuition.

**Figure 2. Average Tuition and Fees Charged Full-Time, First-Time Undergraduate Students at Public Two-Year Institutions, by State: 2011–12.**



Source: Authors' calculations, U.S. Department of Education, National Center for Education Statistics, IPEDS, Fall 2011, *Institutional Characteristics* component.

**Figure 3. Average Tuition and Required Fees for Full-Time, First-Time Degree/Certificate-Seeking Undergraduates at All Title IV Institutions, by Level and Control of Institution: 2011–12.**



Source: Authors' summary of Knapp, Kelly-Reid, and Ginder, 2012b, 5, table 2.

Enrollments in the for-profit, two-year sector, while still relatively small, are growing.<sup>31</sup> These colleges absorb some of the unmet demand for sub-baccalaureate courses and credentials at a time when community colleges must turn students away from oversubscribed sections.<sup>32</sup>

**Student loan debt.** A typical two or three thousand-dollar tuition charge is a significant sum for low-income students and their families. But many students meet that cost from their savings and earnings. Borrowing for college is now the norm, but the proportion of first-time, full-time community college students receiving federal loans was 22.7 percent.<sup>33</sup> About 62 percent of graduates from public two-year colleges had no student loan debt.<sup>34</sup> That's because of the high concentration of community college students in a few relatively low tuition states, such as California and Texas.

Low costs, plus the availability of Pell, state, and institutional grants help to explain how most students avoided debt while completing their associate's degree. By contrast, 86 percent of students earning associate's degrees from for-profit colleges took on debt in 2009–10. These students were the most likely to accrue the highest levels of debt, averaging \$9,641.<sup>35</sup> The for-profit sector may meet an otherwise unmet demand—at a much higher cost to students.

**Philanthropy.** Some observers look to private giving to support community colleges as governmental appropriations decline. But philanthropy is not a tradition among community college alumni or supporters. Most community colleges reported no additions to their endowments in 2010–11. Nearly half reported zero dollars in gifts.<sup>36</sup>

Challenges to fundraising include small or non-existent development offices and inadequate resources for attracting alumni support. Community colleges rarely retain new donors or convince potential donors that government funding is inadequate. Conversely, colleges in states with higher appropriations and with students having less financial need—measured by Pell Grant dollars per full-time student—obtained more endowments and gifts.<sup>37</sup> But save for tuition and fees, non-governmental revenues sum to a small amount of total revenues.

**Expenditures.** Most colleges have little flexibility in administering revenues from tuition and fees. The state collects most of these funds and reallocates the dollars to colleges according to enrollment-based per capita funding formulas. Government appropriations and operating grants are spent on personnel costs, leaving little room for discretionary spending. These costs consume 80 to 85 percent of the average community college budget.<sup>38</sup> The instruction budget accounted for 41.7 percent of total expenditures in FY 2011. Student services took 9.9 percent, and institutional support—administrative and academic services—used up 15.3 percent. At public universities, 29.3 percent of spending went to instruction, 4.5 percent went to student services, and 8.7 percent went to institutional support. These differences are consistent with differences in revenue sources and institutional mission. Community colleges focus on teaching while universities receive significant research funding.

One difference in expenditures between sectors results from the greater financial needs of the community college student body. These colleges provided over \$7.5 billion in scholarships and grants in FY 2011; 13.7 percent of total expenditures. Public universities distributed almost \$11 billion, but these scholarships amounted to only 4.3 percent of their budgets.<sup>39</sup> The first Obama administration bolstered this larger share of spending by greatly increasing Pell Grant stipends and expanding eligibility.

## **THE MULTIPLE MEANINGS OF EQUITY, EFFICIENCY, AND ACCOUNTABILITY**

This section summarizes the multiple meanings of equity, efficiency, and accountability, provides definitions and examples, and highlights the associated terms of political discourse. It notes pressing and recurring community college finance issues, typically revolving around the longstanding tensions between equity and efficiency goals.<sup>40</sup>

### **Equity**

From a rational policy perspective, achieving equity depends on how public resources are distributed and on who gains and loses from that distribution.<sup>41</sup> Equity “refers to the effects of a public policy on the fairness of the distribution of benefits and costs to society.”<sup>42</sup> An analysis of distributive justice must consider three questions: “First, who are the recipients and what are the many ways of defining them? Second, what is being distributed and what are the many ways of defining it? And third, what are the social processes by which distribution is determined?”<sup>43</sup> Applied to higher education, these questions become: who merits public resources to attend college, how much of available resources should go to individuals with varying qualifications, and what expectations students and colleges must meet to receive public resources.

**Horizontal, vertical, and outcome equity.** The standards for determining what constitutes distributive justice are contentious. Scholars developed terms such as vertical, horizontal, and outcome equity to elaborate on funding standards.<sup>44</sup> These terms hint at the nuances involved in adopting equity as a funding goal. Horizontal equity—best understood relative to vertical equity—declares that students with equal needs receive equal resources. For example, a state will provide equal levels of funding to colleges for each enrolled student or full-time equivalent student. This principle justifies foundational base funding: providing equal resources results in equal chances to learn.

A society with social injustices, past and present, can use educational policy to undo those injustices. Vertical or social equity calls for “unequals [to] be treated unequally” and for funds to be distributed in ways that are “responsive [to the] varying needs that students represent.”<sup>45</sup> If students with fewer resources and greater educational needs deserve more funding, then per capita expenditures should be rationed according to these needs beyond foundation funding levels.<sup>46</sup>

Higher education funding is based on these principles of horizontal and vertical equity. Community colleges, often called “people’s colleges,” are the cornerstone of equal access and opportunity.<sup>47</sup> Anyone meeting the minimal ability to benefit criteria—a high school diploma or GED, for example—may enroll. Formula funding gives each college equal resources for every enrolled student, but vertical inequities complicate the picture.

Community colleges receive fewer resources per capita than public universities and are less well funded than private, not-for-profit colleges and universities. The best quality higher education is rationed through admissions to selective colleges. This rationing disproportionately benefits higher income individuals while pricing out low-income students.<sup>48</sup> Students admitted to institutions in those sectors, though typically having fewer educational needs, capture more resources. Academic merit and the ability of students to benefit from these resources justify these greater allocations. Community colleges restore vertical equity to an otherwise stratified, hierarchical system. The mechanisms used include open access, and basic skills, compensatory, or remedial education.<sup>49</sup> These colleges offer students a chance to transfer to the four-year sector, though few students move to the highest tiers: selective liberal arts colleges and research universities.<sup>50</sup> But higher education subsidies decrease in states with more economic inequality; public support for vertical equity lags behind social need in those states.<sup>51</sup>

Attempts to ration access are hotly contested because the open access mission defines community colleges. California, for example, recently adopted progress-to-degree standards that prioritize access to its community colleges.<sup>52</sup> Public resources for higher education lag demand, so rationing access illustrates the difficulty of determining “how unequal is unequal enough?”<sup>53</sup> The challenge is to prioritize compensatory funding among ostensibly deserving recipients.

The concept of outcome equity answers the question, “How much compensatory funding must be redistributed from more to less affluent communities under state ‘equalization’ formulas to meet vertical equity principles?” The money needed to achieve desired educational outcomes determines the required funding level under the outcome equity standard. Learning proficiency scores, a high school diploma, and degree completion measure these outcomes. Prior to using the outcome equity standard, governments equalized funding based on input costs—salaries and facilities, for example.<sup>54</sup>

Implementing policy based on these abstract concepts, even if they are endorsed in principle, hinges on choosing an appropriate resource level and on determining who deserves additional resources. These decisions are more political than principled. Such political debates led to long fought, hotly contested judicial cases that began in the 1960s and continue to today. With few exceptions, these debates and judicial cases affected K–12 finances. A state role in equalizing local revenues is less common in community college financing because half the states do not have these revenues. State governments do play a redistributive role where there are local revenues. But they adjust allocations for economies of scale as often as they redistribute resources to colleges enrolling students with greater educational needs.<sup>55</sup> The focus on K–12 where localities and states share community college funding arises from the view that elementary and secondary education



is a civil and (in many states) a constitutional right. Postsecondary education does not enjoy that status. The distribution of higher education funding provides an equal opportunity to enroll in some college or university, but it does not seek to ensure equal outcomes. Funding access, not completion, complicates attempts to hold community colleges accountable for producing college graduates.

**Political discourse on equity.** To summarize, when applied to community college financing, the principle of horizontal equity is articulated in terms of equal educational opportunity and equal access (Table 1). Vertical equity is manifested in open access and compensatory policies that offset a larger system providing greater resources to students with fewer educational needs.<sup>56</sup> Examples of community college revenues that promote horizontal equity include local and state tuition and fee subsidies. (Table 2). Anyone, poor or affluent, may take advantage of these low tuition charges. Examples of funding sources that promote vertical equity are need-based scholarships, grants, or fee waivers, provided by local organizations, the state, or the federal government. Funds for special programs, such as additional counseling and academic advising, also support vertical equity. The federal and state governments provide these funds, called categorical aid.

**Efficiency**

Efficiency has two distinct meanings relevant to educational finance. *Productive or technical efficiency* dictates how goods are produced. *Economic efficiency* requires outputs consistent with socially preferred ways of using public institutions to bring about the public good.<sup>57</sup> Economic efficiency cannot be obtained when socially undesirable outcomes are produced.<sup>58</sup>

**Productive efficiency.** Productive efficiency refers to the capacity of an organization to produce a desired good or outcome with fewer inputs. We are familiar with this concept from our household chores. Recognizing that time is our most precious resource, we might ask, “If I rearrange the pots and pans in my kitchen, can I cook the same delicious meals as I do now in half the time?” The “same delicious meals” criterion is important. Greater efficiency is not synonymous with lower quality. Instead, it implies more effective use of available resources to achieve the same quality of outputs. Efficiency is therefore sometimes equated with effectiveness.

**Economic efficiency.** An economically efficient investment of public funds requires choosing the option and funding level among educational alternatives that returns the best benefit. A concern for economic efficiency frames the debate

**Table 1. Key Terms of Political Discourse, by Funding Goals**

| Equity            |                                   | Efficiency                      |                      |
|-------------------|-----------------------------------|---------------------------------|----------------------|
| Horizontal        | Vertical                          | Productive (a.k.a. “Technical”) | Economic             |
| Equal opportunity | Open access enrollment            | Efficiency                      | Return on investment |
| Equal access      | Compensatory (remedial) education | Productivity                    | Economic benefits    |
|                   |                                   | Performance                     | Human capital        |
|                   |                                   | Quality                         | Taxpayer savings     |
|                   |                                   |                                 | Academic merit       |

**Table 2. Examples of Financing Mechanisms, by Funding Goals and Level of Government**

| Level   | Equity                                            |                                                                                                                         | Efficiency                                                                   |                                                                                                     |
|---------|---------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
|         | Horizontal                                        | Vertical                                                                                                                | Technical                                                                    | Economic                                                                                            |
| Local   | Appropriations to subsidize low tuition and fees. | Scholarships awarded by community organizations to students with financial need.                                        | Capital (bond) funds for “green” buildings or updated scientific facilities. | “Promise” guaranteed transfer programs.                                                             |
| State   | Appropriations to subsidize low tuition and fees. | Need-based financial aid (grants and fee waivers).<br><br>Categorical aid for counseling and academic support programs. | Performance funding (input/process metrics).                                 | Transfer policies and transfer scholarships.                                                        |
| Federal | —                                                 | Need-based aid (Pell Grants, subsidized loans).<br><br>Categorical aid.                                                 | Grant funding requirements for administrative capacity for data analysis.    | HSI-STEM transfer and articulation funds (Title V).<br><br>Income-based repayment of student loans. |

on how to treat students who are not ready for college level classes. Should community colleges enroll these students? Or should they “get up to speed” through other means, such as programs in Adult Basic Education (ABE), taught in high schools or community centers? If the latter, it would be because the “marginal” or “additional social” benefit of providing these learners a community college education is less than the marginal benefit derived from investing the same dollars in ABE programs.

Income-based repayment (IBR) of federal subsidized loans exemplifies financial aid policies aimed at economic efficiency. Under IBR, students who do not earn enough to repay their federal student loans fully become eligible to pay a lesser amount and even, if necessary over the long term, to repay less than the full amount owed. This approach allows more reliance on loans than grants, by reassuring students that debt relief is available. The government

provides relief for some students, but the total subsidy is lower because successful graduates pay for themselves. This economically efficient policy costs less than alternatives that generate the same number of college-educated citizens, though the program’s implementation is not entirely efficient in a technical sense. Many students are not farsighted in their college financing decisions.

The difficulty of fully accounting for costs and benefits challenges the applicability of this concept to community college finance. These colleges produce public or social benefits and private or individual benefits. How do we assign monetary value to benefits such as greater civic engagement? These colleges also assume multiple missions, including vocational education, transfer preparation, community programs for recreational education, teaching English as a second language, and developmental education. Multiple missions complicate attempts to

isolate and measure the outcomes deserving greater funding. Is it economically efficient to provide basket-weaving courses to individuals with bachelor's degrees? Should students enrolled in transfer courses and in developmental, non-degree credit courses pay the same tuition?

Estimating the opportunity cost or value of the benefit lost by rejecting the alternative investment provides another complication. This complication occurs when comparing investments across sectors. Is a dollar better spent on K-12, community colleges, or research universities? It also occurs when comparing investments across different public institutions. Is a dollar better spent on colleges or prisons? Voters, faced with bond acts to build a college or a prison, might guess at the relative social costs and benefits. But the difficulty of making a comprehensive economic accounting makes it more likely that voters will apply political considerations or value judgments when making their decisions.

**Political discourse on efficiency.** Terms used in political discourse geared at promoting productive efficiency include institutional performance, productivity, quality, and management (Table 1). The word "efficiency" is also most often equated with productive efficiency, which emphasizes less wasteful administration and bureaucracy. Phrases reflecting these concerns, such as Total Quality Management and Continuous Improvement Programs, once attained fad-like status in higher education circles.<sup>59</sup>

Advocates of economically efficient choices emphasize such concepts as return on investment of public resources, economic benefits, and the public good derived from sufficient human capital. Economic efficiency advocates focus on the prospects of taxpayer savings. They ask who deserves to benefit from higher education resources; what is the likely return on their use of those resources, and how many second or third chances should colleges give

students. Economic efficiency also justifies providing more resources to selective institutions, and fewer resources to open access institutions. Expend more resources, advocates urge, on students with the greatest ability to learn and to assume elite positions in business, government, and the professions. Similarly, expend more funds in fields of study that return greater economic benefits, such as science and technology fields rather than in the humanities.

**Funding mechanisms for productive efficiency.** Examples of funding strategies designed to promote productive efficiency can be found at the local, state, and federal levels (Table 2). A concern for productive efficiency can be discerned in local campaigns for taxes or bonds to pay for new facilities. Campaigns for a bond act to fund "green" buildings that save energy, or for scientific facilities that produce better science students illustrate appeals to the productive efficiency standard. At the state level, performance funding, which bases a share of appropriations on measures of institutional productivity, is the prime example of administrative efficiency.<sup>60</sup>

Approximately half the states adopted performance funding since the 1980s.<sup>61</sup> Premised on the belief that colleges are inefficient and nonproductive, this funding mechanism elicits greater accountability to the public. The ratio of average credits completed to credits attempted exemplifies measures of productive efficiency. Colleges are efficient when they organize administrative policies and resources to assure that students complete their coursework. Pressures for productive efficiency aim to compel colleges to produce more output—earning a vocational certificate, for example—for the same level of input.<sup>62</sup>

The federal government requires colleges that apply for competitive grants to demonstrate the capacity to track student progress through the curriculum or from one college or degree program to another. Such administrative capacity is deemed necessary to identify wasteful

enrollment patterns. Some students, for example, accumulate many credits but remain ineligible for an associate's degree or for transfer. But many community colleges, lacking adequate data management systems or institutional research staff, do not possess this capacity.<sup>63</sup>

**Funding mechanisms for economic efficiency.**

Economic efficiency provides the conceptual foundation for stratifying resources and access. The principles of economic efficiency and vertical equity often conflict, because resources often go to students with less educational need but greater academic proficiency. A need for workers in all types of occupations and for educated human capital can check that impulse. California's master plan for higher education illustrates these checks and balances. The plan allocates spaces and differential funding to students based on academic merit. Students demonstrating the strongest academic preparation gain admission to University of California (UC) campuses, which receive the greatest per capita funding. The least prepared students gain admission to community colleges, which receive the least. Students in the middle have access to California State Universities (CSUs), which are funded at a middle level.

The greater funding at UCs supports the objective of educating elites to fill leadership positions. The education required by a teacher, nurse, paramedic, firefighter, or computer technician receives less funding. This economically efficient arrangement allows society to meet its preference for educating workers for a range of occupations at the least possible public expense.

Well functioning community college transfer policies and programs support economic efficiency. Policies, such as guaranteed transfer admissions, use community college and state university resources to prioritize curriculum articulation—that credits earned at the community college count towards a specific degree at the university—and assistance in navigating the transfer process.<sup>64</sup> Taxpayers realize a savings when students obtain a bachelor's degree

by spending two years at a community college before transferring to a more expensive four-year institution. The principle of economic efficiency dictates that students acquire as many prerequisites as possible at the community college, with its lower costs per student. This principle holds as long as the outcome, bachelor's degree completion, is attained.

Several factors complicate this economically efficient scenario. Community colleges have not received fiscal support commensurate with rising enrollments.<sup>65</sup> In 2010, average state appropriations per student decreased seven to nine percent at public four-year institutions. By contrast, community colleges suffered a 14 percent per student decline in state and local appropriations.<sup>66</sup> Yet, enrollments at California community colleges grew 280 percent from 1965 to 2011 while public four-year university enrollments increased by 185 percent.<sup>67</sup> The lower public investment will only provide taxpayers with an economically efficient alternative if the degree completion rate remains the same—a debatable assumption even when adjusting for differences in student characteristics and aspirations.<sup>68</sup> Tuition at the state's public four-year sector is closer to the national average while tuition in the community colleges is the lowest in the nation. So students who might be well served by starting at a university may be attracted to the community colleges under the mistaken perception that they are “a much bigger higher education ‘bargain’” than they are, taking completion rates into account.<sup>69</sup>

Local governments do not allocate appropriations for transfer per se. But they help to develop programs to create better transfer pathways. “Promise” programs that guarantee high school graduates a pathway to the bachelor's degree through the community college illustrate local investments in transfer. *Adelante* and the Long Beach Promise, involving Santa Ana College and Long Beach City College, are two examples of many that exist throughout the country.<sup>70</sup> Colleges and universities enter into articulation agreements to promote transfer on

a regional basis. The majority of states have legislation to help ensure that the community college curriculum aligns with university degree programs and that course credits will count towards a bachelor's degree.<sup>71</sup> Some states have also funded scholarships for transfer students.<sup>72</sup>

The federal government's role is most often designed to be equity enhancing.<sup>73</sup> But recent legislation promotes economically efficient use of resources. These laws invest a billion dollars in two- to four-year college transfer and articulation programs for science, technology, engineering, and mathematics (STEM) students at Hispanic Serving Institutions.<sup>74</sup> Few STEM students obtain associate's degrees before earning their bachelor's degree. Conversely, most transfer students earn degrees in other fields of study.<sup>75</sup> The nation needs human capital in STEM professions, so by making transfer pathways in STEM fields more attractive, the federal government promotes efficiency at the community college. The law also promotes vertical equity by restricting funds to historically underfunded HSIs.

**Summary.** Motivating students to complete associate's degrees at community colleges and then to transfer to a college offering a bachelor's degree exemplifies the economic efficiency principle (Table 2). States usually create these incentives by changing enrollment and admissions policies, rather than by direct financing. Local governments and philanthropic foundations support economic efficiency through "guaranteed" transfer or "promise" programs. Similarly, the federal government supported efficiency through the HSI-STEM transfer and articulation program, administered through Title V of the HEA. "Promise" programs also promote vertical equity, by providing more resources to students needing support to reach a bachelor's degree.

Economic efficiency and vertical equity can be complementary, but the two principles are often in conflict.<sup>76</sup> The conflict emerges when creating economically efficient pathways

results in rationing and restricted access to resource-rich institutions. Such restrictions include eliminating remedial education or confining remedial classes to community colleges; 22 states and higher education systems have implemented such policies.<sup>77</sup>

### Accountability

Accountability is "the obligation to report to others, to explain, to justify, to answer questions about how resources have been used, and to what effect."<sup>78</sup> Several questions quickly follow, such as: Who is accountable to whom? For what processes and outcomes?<sup>79</sup> A popular typology of accountability identifies the three types of accountability standards for publicly funded institutions: bureaucratic, market, and professional.<sup>80</sup> This section describes the standards, and their development, with reference to financing goals of equity and efficiency. Table 3 summarizes the key terms of political discourse concerning accountability standards. We explore the meaning of these terms as we identify community college accountability initiatives. Table 4 lists the most prominent accountability mechanisms utilized at the local, state, and federal levels.

The relationship between higher education and providers of operating resources shifted over recent decades. Colleges and universities are pressured to become more accountable to state legislatures and the federal government, and more responsive to the need for human capital.<sup>81</sup> Performance funding emerged as a reform-minded funding strategy designed to elicit greater accountability and a focus on outcomes.<sup>82</sup> But the public now views the institutions it funds solely in terms of their service to the economy.<sup>83</sup> Critics view traditional forms of shared governance among boards, administrative leaders, and faculty with suspicion. Fewer tenured or tenure-track faculty positions are established, and collective bargaining units face strong political opposition.

Today's "college completion agenda"—framed in terms of the human capital economic

**Table 3. Key Terms of Political Discourse, by Accountability Standards**

| Accountability Standards |                |                       |
|--------------------------|----------------|-----------------------|
| Horizontal               | Vertical       | Technical             |
| Rules                    | Human capital  | Expertise             |
| Regulations              | Responsiveness | Peer review           |
| Compliance               | Customer       | Inquiry               |
| Instructional delivery   | Client         | Community of practice |
|                          | Flexibility    | Best practices        |
|                          | Transparency   |                       |

needs and of maintaining global competitiveness—spurs colleges and universities to produce more graduates. President Obama’s administration, education philanthropies, and the National Governors Association call for greater efficiency in producing graduates, measured by the number of degrees and certificates awarded.

The mechanisms to elicit greater accountability changed over time, with “market-like” strategies emerging as a favored approach.<sup>84</sup> But crude definitions of “productivity” challenge genuine accountability. So does the deeply held identity of many community college practitioners as democratizers. The emphasis on completion, many advocates fear, will restrict access.<sup>85</sup> Changes in community college financing and accountability therefore typically occur at the “tip of the iceberg.” Traditional forms of shared governance and administrative practices are left largely intact.

The close relationship between performance reporting and performance funding illustrates the halting drive from bureaucratic towards market accountability. Performance funding, the primary mechanism of market accountability, introduces uncertainty as to whether a college will earn all available appropriations. It “incentivizes” institutional accountability by awarding a percentage of government subsidies when a college demonstrates desired behaviors

or outcomes. Prior practices emphasized stability of funding streams and horizontal equity in allocations.

These shifts in accountability produced tension between equity and efficiency goals. But, as we noted, these goals are not always incompatible. The extent to which equity goals are present within an accountability initiative depends on the indicators of performance: “What gets counted, counts.” The desired behaviors sought through incentivized appropriations are most typically framed in terms of the human capital needs. But some accountability metrics incorporate indicators of equity in access or basic skills education, which is becoming a contested civil right.<sup>86</sup> Low-income and racially minoritized communities need jobs; so some human capital indicators could also enhance equity.

**Bureaucratic accountability.** Governing boards and local and state governments wish to ensure stability of operations, sound fiscal stewardship, and college attention to their educational priorities. Bureaucratic accountability relies on rules, regulations, legislation, and master plans to set performance expectations. To demonstrate compliance, community college presidents or superintendents routinely report to governing or coordinating boards, whose members are either elected or appointed, at the local or state level.

**Table 4. Examples of Accountability Mechanisms, by Level of Government**

| Level   | Accountability                                                                                                     |                                                                                                                                                                        |                                                         |
|---------|--------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|         | Bureaucratic                                                                                                       | Market                                                                                                                                                                 | Professional                                            |
| Local   | Performance reporting to governing boards                                                                          | Contract funding<br><br>Extension (non-credit; recreational) courses                                                                                                   | Shared governance<br><br>Tenure and promotion standards |
| State   | Performance reporting to governing boards<br><br>Performance funding (emphasis on efficiency and equity in access) | Performance funding (emphasis on employers' needs for human capital in high demand fields)                                                                             | Shared governance                                       |
| Federal | Annual reports required for receipt of operating grants                                                            | Institutional responsibility for student loan default rates<br><br>Semester time restrictions on use of Pell Grants<br><br>IPEDS data<br><br>Student Right to Know Act | Accreditation                                           |

This performance reporting constitutes the foundation of accountability at the local and state levels (Table 4, column 1). College leaders must demonstrate fiduciary control, stable operations, and functioning administrative procedures. Colleges receiving federal operating grants, for example through the Strengthening Institutions (Title III) or Hispanic Serving Institutions (Title V) programs, must allocate some of these funds to providing annual external evaluations to the granting agency.

Bureaucratic accountability promotes administrative or technical efficiencies through policies governing spending on personnel, on academic functions such as registration, enrollment, placement testing, and instructional delivery, and on non-academic functions, such as budgeting and procurement. Indicators of technical efficiency include instructional expenses per credit hour of instructional delivery (Missouri); the number of degrees or certificates awarded per FTE (Tennessee); the ratio of administrative

to academic costs (South Carolina); the number of credits students accumulate before transfer or graduating (Tennessee and Florida); and a time-to-degree measure known as a “graduation efficiency index” (Washington).<sup>87</sup>

Bureaucratic accountability may also require colleges to address equity issues, in routine or special reports for example. Regulators may ask for data comparing the racial, ethnic, and socioeconomic characteristics of the student body to the service area of the college. Indicators of equity-enhancing requirements include enrollment and success of “at risk” students—identified by financial need or by lack of academic preparation (Tennessee, Indiana, and Ohio).<sup>88</sup> That some states developed performance indicators measuring technical efficiency and equity in access shows that efficiency and equity can co-exist as priorities.

Contracts negotiated between community college officials and collective bargaining units are not typically considered a form of

accountability because they are two-way contractual agreements, not assertions of authority by governing bodies. These contracts delimit the terms under which they engage in their professional duties. But union contracts may resemble bureaucratic accountability when they govern the terms of the “production” and technical efficiency of education: the type and amount of work and the compensation. The contracts detail the number of classes faculty members must teach each semester, the amount of service they provide, and the hours spent in professional development. Compensation includes salary, pensions, holidays, and leave time for illness and family care, with differentiation by academic rank, educational credentials, and length of service.

These contracts have a greater effect on the means of production than performance funding because community colleges expend most of their funds on personnel. Any increase in productivity requires faculty and staff cooperation. The antipathy toward bargaining rights and union contracts—Wisconsin legislators eliminated collective bargaining for public employees in 2011—expressed by some governing bodies reflects a suspicion of bureaucratic forms of governance and a preference for a “free market” determination of compensation and the terms of employment.<sup>89</sup>

**Market accountability.** The recent development of performance funding represents a notable shift in governance from bureaucratic accountability to market accountability strategies. Many state governments search for strategies that effectively link allocations to indicators that measure outcomes. They have moved beyond providing appropriations in exchange for compliance with bureaucratic rules that regulate inputs and processes. They want colleges to attend to governmental priorities, not their own interests and agendas. Market accountability enables governments to tailor and direct scarce public resources towards market demands.<sup>90</sup>

Performance funding mechanisms sought to mimic the competition faced by firms by creating market-like incentives and sanctions. Market accountability strategies assume that colleges will compete for revenues by improving their productivity on specified performance indicators.<sup>91</sup> Governments allocate subsidies as the “profits” of a college’s productivity. Table 4 therefore lists performance funding in the bureaucratic *and* market accountability categories. Indicators of bureaucratic accountability are designed to motivate performance towards greater efficiency and equity. Market accountability measures aim to provide high quality human capital to the workforce.

Early performance funding (PF1) met with limited success. Proponents then designed new approaches, referred to as “performance funding 2.0” (PF2).<sup>92</sup> PF1 plans added a bonus to regular appropriations, if a college met performance goals. PF2 strategies based a proportion of “regular” appropriations on adequate performance. The typical proportion of money at stake grew from five to ten percent of college budgets.<sup>93</sup> This proportion is not large, given the limited amount of revenues available for discretionary spending. But it was enough to elicit attention and controversy, especially as public investments in education declined. College leaders viewed many plans as undesirable “do more with less” mandates.

PF2 approaches adopted more nuanced performance indicators to create more legitimate expectations. PF1 based performance on broad indicators of student progress, such as year to year retention and movement from remedial to transfer-credit courses, and on valued end points, such as job placement and degree completion.<sup>94</sup> The newer PF2 indicators did not treat colleges as “black boxes” into which state dollars flowed as inputs and graduates emerged as outputs. Instead, these indicators included specific milestones that often block student progress and that colleges can eliminate—for instance, completing specific remedial courses and attaining key thresholds, such as 12, 15, or 30 credits.



“Contract training” programs, which colleges and industry partners create to meet specific workforce training needs, exemplify responses to market demands (Table 4).<sup>95</sup> Evaluators can measure the productivity of the college by counting the number of students trained and certified to fill jobs in the partner industries and by the placement rates of program completers. Such programs tie community colleges closely to local businesses, which tend to be represented on governing boards. Table 4 uses funding for contract training programs to exemplify local level market accountability. States use performance funding to direct community colleges towards meeting human capital needs. Table 4 also includes performance funding as an example of state level market accountability. The most common human capital indicators include measures of STEM degree production, job placement, and workforce training.

The federal government does not provide appropriations to community colleges. But it imposes performance expectations by regulating the distribution of the billions of dollars of financial aid, an important revenue source. Colleges with unusually high proportions of students defaulting on their federally subsidized student loans lose the right to provide these loans and jeopardize their eligibility for Title IV funding. Students who spend more than 12 semesters in college lose their eligibility for Pell Grants—a newly imposed restriction.<sup>96</sup>

These requirements could force colleges to ensure that students make steady progress towards completion and find gainful employment. But for colleges to respond as desired to the loss of student financial aid, they would have to be competing for more students and able to influence the conditions affecting students’ ability to receive funds. Many community colleges are not competing—they face excess demand—nor do they always have influence over the employment opportunities of their students. Therefore, they have not responded well to such sanctions. Some

colleges, for example, responded to concerns about student loan default rates by refusing to provide loans to their students.<sup>97</sup> Financial aid policies may act more like bureaucratic than market accountability strategies, absent ways to motivate improved student advising and to match students to the labor market.

Market accountability strategies that cast students as clients or consumers require that students receive information enabling them to make wise choices. The market accountability perspective has therefore led to demands for accessible and transparent data on student persistence, transfer, and graduation rates. The federal government now provides much of this information. Colleges desiring Title IV (financial aid) funds must report data to IPEDS, the components of which grew under the Student Right to Know (SRK) and the Campus Security Act.<sup>98</sup> SRK provides information about costs, campus security and incidence of crime, and outcomes, such as transfer and graduation. After making financial aid funding contingent on data reporting, the Department of Education created web-based search tools to make that data accessible to prospective students who wish to select where to take courses or to earn a degree.

A lack of geographic mobility and the excess of demand over supply for seats in community college classrooms limits the consumer power of traditional-age, degree-seeking students and of low-income adult learners.<sup>99</sup> These students—disproportionately Latinos, who are more likely to enroll in community colleges than other racial or ethnic groups—have more political than economic power, as recent protests against tuition increases at California community colleges demonstrate.<sup>100</sup>

Paradoxically, taxpayers in the local community college service areas exercise the greatest consumer power. Offering non-credit recreational courses, such as “basket weaving,” foreign languages, health and well being, cooking, and dancing to well off citizens may not be an efficient use of resources. But such courses are

staples across the country. Table 4 lists recreational courses as examples of programs highly responsive to demand and therefore subject to market accountability at the local level.

These courses are often variably priced to cover the costs of materials and the time of the instructors. Like contract training, they are cancelled if local demand dissipates and enrollment is insufficient. Administrators, not faculty, control curricular offerings. Their administrative functions, such as registration, are often subsidized. As a result, colleges typically charge considerably less than for-profit competitors with similar offerings. Administrators and governing boards are loath to curtail recreational offerings because participating students must support the college through their taxes. Even a visit by taxpaying adults to the college website or a trip to campus to enroll in these classes promotes a sense of communal ownership.

**Professional accountability.** Professional accountability refers to the responsibility of administrators, counselors, and faculty to use their knowledge, expertise, and “practical wisdom” to assure educational quality and productivity.<sup>101</sup> Problems are solved and quality assured through shared governance, informal consultation, and peer review for tenure and promotion among members of a community of practice. Inquiry—a systematic process of data use for problem framing, experimentation, and problem solving—is the preferred mechanism for change. Promoting professional accountability therefore emphasizes “best practices” or cultures of evidence or inquiry (Table 3).<sup>102</sup>

Professional accountability is often viewed as antithetical to market and bureaucratic accountability. Practitioners, critics believe, are unresponsive to external priorities, inwardly focused on educational processes and their own disciplines, and interested only in self-governance. But professional accountability stresses the ability of practitioners to “make independent and important decisions,” because

they can best determine how to produce positive educational outcomes.<sup>103</sup> Practitioners must develop and maintain a high degree of expertise and take responsibility for problems of practice where they occur.

The primary enforcement mechanism of professional accountability is accreditation, the voluntary system of peer review. Accreditation is subject to oversight by the federal government, which recognizes six regional accrediting commissions (Table 4).<sup>104</sup> The commissions, in turn, establish and monitor compliance with the standards of review and quality that certify colleges as eligible for Title IV and other federal funds. The process emphasizes mission focus, sound fiduciary control, shared governance, instructional and curricular quality, and assessment as a form of organizational learning and improvement.

But critics view accreditation as a weak, self-serving strategy, and the movement toward market accountability placed accreditation on the defensive.<sup>105</sup> In response, community college accreditors shifted to a focus on outcomes, especially student learning outcomes (SLOs). SLOs, are clearly documented, course-by-course statements of desired learning objectives and curriculum maps of the alignment of those objectives. These outcomes demand much attention in the Western states because accreditors warned and sanctioned many community colleges for poor performance. These sanctions threatened loss of accreditation, which in turn forces unaccredited community colleges to close or to be subsumed into another college.<sup>106</sup>

Despite this move towards learning outcomes, the fundamental values and governance processes of professional accountability often clash with market accountability. Practitioners, particularly faculty members, often reject the productivity metaphor as applied to the teaching and learning processes. These colleagues use metaphors, such as community, mentorship, and apprenticeship—perhaps more accurately—to communicate the growth, development, and change desired of the educational

process. They add desirable democratic, civic, and community participation and personal growth to human capital outcomes. The value of this broader range of outcomes keeps with the democratizing role of colleges and their community orientation.

It is debatable whether state-level performance funding leads colleges to respond similarly to firms seeking profits in private markets. The rhetoric that now defines the relationship between colleges and governments emphasizes efficiency through market-like incentives. But multiple outputs, values, and goals complicate the “production processes” of community colleges. Reflecting these complications, indicators of college productivity moved closer to reflecting the “workings” of educational productivity. Student progress indicators (PF2) are more closely connected to specific curricular milestones such as course completion and credit accumulation.

PF2 indicators are signs of progress in market accountability because colleges can only respond efficiently to market incentives if they know and can control the aspects of teaching, advising, and administration that need improvement. Colleges will only become more productive and efficient if the personnel whose salaries capture the majority of available revenues are “on board” with those goals. The core of the educational process depends on faculty and counselors in their role as teachers, mentors, and advisors. Therefore, professional knowledge, competence, agency, and motivation to address problems of practice are critical components of professional accountability. Absent buy-in, the result may be greater bureaucracy.

Researchers have attempted to ameliorate an issue contributing to reluctance among practitioners to view performance indicators as legitimate. Practitioners may consider the measures of college effectiveness unfair because they fail to take into account that their colleges are asked to “do more with less.” PF1 indicators rarely took the differences in student preparation and needs into account, though these differences

vary widely among colleges serving dissimilar communities and populations.<sup>107</sup> As a result, practitioners criticized performance funding for ignoring funding inequities. Worse, the scheme exacerbated the inequities by awarding more dollars to colleges with initial advantages, including better-prepared student bodies and more local resources. Unequal starting points led to failed comparisons of effectiveness and performance in producing graduates. The development of “value added” indicators of college performance was a response to the need to find better measures of program quality.<sup>108</sup> These indicators incorporate the need for some colleges to counter inequities in student pre-college preparation, while asked to do more with less.

**Professional accountability indicators.** The concept of a culture of inquiry captures the value of institutional assessment processes that utilize data for problem framing, experimentation, innovation, and solution generation. In turn, the inquiry process enhances the adaptive expertise of practitioners.<sup>109</sup> Inquiry becomes a means to nurture professional communities of practice that embrace academic norms while holding colleges and practitioners accountable for student outcomes. Accreditation standards now include the ability of a college to demonstrate data use for decision-making and organizational capacity for improvement.

Several organizations have produced inquiry tools, including the Center for Urban Education (CUE), where we are affiliated. CUE-developed accountability indicators direct attention to institutional ineffectiveness and to inequities in student outcomes. The indicators include lists of desired professional behaviors, vignettes illustrating the work of exemplary practitioners, and narratives showing how practitioners take responsibility for improving equity and effectiveness. CUE tools and reports feature community college faculty acting as “institutional agents” who support Latino students at HSIs through mentoring and advising. They

also note institutional level interventions, such as changing policies with inequitable impacts or expanding professional networks to provide more resources to Latino students.<sup>110</sup>

Support for inquiry has waned along with the decline in economic conditions in most states. But indicators of inquiry were at one time incorporated into state-level accountability plans that looked to professional knowledge and expertise as the primary mechanism for improved institutional performance. Acting under the direction of state level initiatives, public two-year colleges in Wisconsin and California were expected to engage faculty and administrators in inquiry to investigate issues of equity and effectiveness. In Wisconsin, where public two-year colleges are part of the University of Wisconsin system, the colleges completed an Equity Scorecard, a CUE action research process. Colleges engaged in the scorecard process addressed inequities in access, retention, transfer, and degree completion among racial and ethnic groups. The scorecard indicators were organized into a set of vital signs, using data such as retention and graduation rates.<sup>111</sup>

Inquiry was a central component of California's Basic Skills Initiative (BSI). The BSI aimed to increase institutional effectiveness by improving the success rates of students enrolled in remedial or developmental courses in community colleges. These colleges were expected to complete and document an inquiry process in return for BSI funds. A monograph published by a statewide organization of institutional researchers described "best practices" indicators in basic skills education that would act as prompts for inquiry.<sup>112</sup> Three California community colleges supplemented their participation by engaging in a benchmarking project. CUE researchers helped teams of project participants collect, review, and analyze data on their instructional practices, student support services, and academic advising.<sup>113</sup> These projects built on earlier inquiry work conducted at nine California community colleges.

Those participants used the Equity Scorecard to meet the Chancellor's criteria for a college-level equity plan.<sup>114</sup>

Inquiry is an effective strategy for improving institutional effectiveness. Guided by prompts on an "equity minded" syllabus-review protocol, faculty participants in CUE-facilitated inquiry reflected on their curricular choices and instructional practices. They related their professional roles to the lives, responsibilities, and outcomes of their students, and assumed greater responsibility for those outcomes by changing their practices. They revised their syllabi, adopted new teaching strategies, and assumed more supportive attitudes in student interactions. Support for equity motivated participants to gain a greater sense of efficacy.<sup>115</sup>

Inquiry works only *up to a point*. Faculty saw themselves as change agents who can influence institutional practices and policies until they "hit a wall" when facing college or system-wide policies hindering their effectiveness. Faculty inquiry and accountability requires the support of college and system leaders. These leaders must also be professionally accountable, even when confronting the sanctions and incentives of market and bureaucratic accountability. But few leaders are voicing alternatives to the human capital emphasis on college completion and economic development.<sup>116</sup>

We possess equal evidence for inquiry and performance funding as means to achieve greater accountability. But the two perspectives are not well regarded. Professional accountability receives less credence because of its process orientation and its emphasis on shared governance. By contrast, the investment-minded perspectives of market accountability resonate with policy makers and legislators attempting to defend or diminish public investments in colleges.

## CONCLUSION

Our discussion reflects the multifaceted nature of community college finance. Funds flow through appropriations from state and local

governments; from operating grants and student financial aid from the federal government, and from students who pay tuition and fees and consume auxiliary services. Private sector revenues—mainly from businesses that contract for training and from philanthropy—contribute a minimal share of funding. State appropriations create a base for equitable funding by providing horizontal equity in “per student” or FTE resources. State and federal programs and financial aid complement this funding base. These programs contribute to “vertical equity” by channeling additional resources to students with greater educational needs. This essay does not ask how well the distribution of revenues achieves equity goals. Instead, we offered a framework for contemplating equity and efficiency goals in tandem and for assessing how well accountability strategies might further those goals. Equity and efficiency are in tension, though they are not incompatible.

The tension arises in navigating the trade-offs between promoting access for all students, supporting their learning and career preparation, and obtaining student quality and high completion rates that demonstrate economic efficiency. No one wants ineffective and inefficient colleges, least of all the students. This essay provides stakeholders and advocates with a framework to navigate productively, and perhaps create a better balance, among those tensions.

Today’s accountability plans emphasize efficiency and human capital investment over equity and democratization. These plans are controversial because performance funding for outcomes diverges sharply from traditional models. Using performance indicators and funding results from and feeds neo-liberal political strategies calling for markets to determine funding priorities.<sup>117</sup> To secure funding, colleges and their units must prove their relevance and effectiveness in relation to market needs.

Yet, most college expenditures go toward personnel costs, and many practitioners continue

to emphasize the multiple missions of community colleges. Practitioners may not accept market metaphors or value the production of human capital over other aims, such as promoting civic engagement, creating culturally inclusive classrooms, or developing student support programs. Performance reporting to state and local boards requires demonstrating compliance with administrative and fiduciary rules and regulations. This means bureaucratic and professional accountability are still operative and must be engaged to pursue funding, whether equity or efficiency is preferred more strongly by a stakeholder.

Market and bureaucratic accountability are married because enrollment-based funding still accounts for the majority of community college revenues. The standard model *was* an effective form of performance funding. Rewarded with greater revenues, enrollments grew significantly.<sup>118</sup> But enrolling many students while graduating only a few, critics claim, serves college interests, not the public interest in a strong economy with well-educated workers. Nor does it serve the interests of students who, as consumers and future employees, seek degrees and certificates acceptable to the labor market. Access and democratization may have previously defined community colleges. But market accountability now requires colleges to meet the needs of the state and the economy. The “saga” defining the community college mission shifted from access to outcomes.<sup>119</sup>

Performance funding was intended to shake up “business as usual” approaches and achieve greater institutional effectiveness. These reforms failed, prompting the development of new performance funding indicators. New state level funding policies must not restrict access. They must instead incorporate more authentic indicators of educational productivity by getting to the heart of teaching and advising. Integrating the perspectives and values of inquiry and professional accountability is a “must” if we are to achieve equity *and* efficiency in performance funding.

## NOTES

<sup>1</sup> Based on the universe of colleges and universities in the U.S. eligible to receive funds through the federal Title IV program, which includes public, private not-for-profit, and private for-profit institutions.

<sup>2</sup> Some scholars argue that the expansion of community colleges was not designed so much to democratize higher education as to “divert” newcomers from low income and immigrant communities from four-year institutions (Brint and Karabel, 1989; Dougherty, 1994; Melguizo and Dowd, 2009). We use the term “minoritized” rather than “minority” to reflect the role of dominant social groups in imposing a minority status on non-dominant groups in certain settings, such as educational institutions, based on skin color, language, or immigrant status.

<sup>3</sup> Authors’ calculations based on the Integrated Postsecondary Education Data System (IPEDS), Winter 2011–12 and Spring 2012, *Finance component*. The number of community colleges reported here includes 1,081 categorized by sector as two-year public institutions. About 50 community colleges that also offer bachelor’s degrees and are classified by sector as four-year public institutions (and as Associate’s Public Four-Year Primarily Associate colleges in the Carnegie Classification system) are not included in this count. The total number of community colleges, including those awarding bachelor’s degrees, is 1,132 according to the American Association of Community Colleges, based on 2012 data. This total includes 986 public colleges, 115 independent colleges, and 31 tribal colleges (AACC).

<sup>4</sup> Knapp, Kelly-Reid, and Ginder, 2012a, Table 1, p. 4.

<sup>5</sup> Brint and Karabel, 1989, 205; Katsinas, D’Amico, and Friedel, 2011; Rhoades, 2012; Rhoades and Valadez, 1996; Shaw, Valadez, and Rhoades, 1999, 2.

<sup>6</sup> American Association of Community Colleges, 2012b; Bailey, Jenkins, and Leinbach, 2006; Bailey, Jeong, and Cho, 2010; Moore, Shulock, and Jensen, 2009; Schneider and Yin, 2012. The terms remedial and developmental education refer to courses taken at the college level that do not count towards degree credits. The differences in terminology reflect differences in ideological perspective and pedagogical approaches.

<sup>7</sup> Dowd, 2008; Phelan, 1999; Townsend and Lambert, 1999.

<sup>8</sup> Obama, February, 2009; Russell, 2011.

<sup>9</sup> Pusser, 2011.

<sup>10</sup> Dougherty, Natow, and Vega, 2012; Dougherty and Reddy, 2011.

<sup>11</sup> American Association of State Colleges and Universities, 2012.

<sup>12</sup> Authors’ calculations using IPEDS, Fall 2011, 12-Month Enrollment (E12) component, which includes all undergraduates, not just first-time, full-time students, based on the public two-year college sample. The state figures are California: 2,369,432, Texas: 1,098,175, Florida: 164,686, New York: 468,569. The total of 4,100,862 for these four states is 37.3 percent of 10,995,832 undergraduates. The enrollment numbers quadruple in Florida to 655,006 when the sample expands to include Associate’s Public Four-Year Primarily Associate colleges (Carnegie Classification). The variation between samples is minimal in the other three states.

<sup>13</sup> Rhoades, 2012.

<sup>14</sup> Knapp, et al., 2012a. Community college revenues are reported according to the revenue and expenditure categories of the Governmental Accounting Standards Board (GASB).

<sup>15</sup> We analysed IPEDS, Winter 2011–12 and Spring 2012, *Finance component*. Hereafter referred to in notes as IPEDS.

<sup>16</sup> Knapp, et al., 2012a, Table 2, p. 6.

<sup>17</sup> Katsinas and Hardy, 2012.

<sup>18</sup> Boswell, 2000; Dowd, 2004; Dowd and Grant, 2006. In contrast, for example, in public four-year universities, local appropriations contributed only 0.2 percent of total revenues nationally.

<sup>19</sup> Authors’ calculations, IPEDS. In 2010–2011, according to IPEDS data, 437 colleges in 31 states reported local appropriations among their revenue sources. But fewer than 25 percent of the colleges in four of those states (Alabama, Colorado, Georgia, and New Hampshire) reported local appropriations. Our count of states with local funding and our estimate of local appropriations in states with local funding omit those states because local funding does not occur statewide.

<sup>20</sup> Knapp, et al., 2012a, Table 2, p. 6. Similarly, 610 colleges reported zero dollars in capital grants and gifts; the number of missing cases for both categories of funding was also high (n=232), possibly indicating negligible or no capital funding. Authors’ calculations, IPEDS.

<sup>21</sup> United States Department of Education, 2012.

<sup>22</sup> Knapp, et al., 2012a, Table 2, p. 6.

<sup>23</sup> Net of allowances and discounts provided to students, for example in the form of need-based aid or waivers.

<sup>24</sup> More than half of the community colleges (n=615) reported zero dollars in sales and services of educational activities in 2010–2011. Authors’ calculations, IPEDS.

<sup>25</sup> This category includes funds classified in more detailed accounting as “other” operating revenues (1.3

percent), “other” non-operating revenues (1.4 percent), and “other revenues and additions” (0.4 percent).

<sup>26</sup> Authors’ calculations, IPEDS. Public two-year colleges that were missing tuition and fees revenue data or reported a value of zero were omitted from the sample.

<sup>27</sup> Baum and Ma, 2012.

<sup>28</sup> Knapp, Kelly-Reid, and Ginder, 2012b, Table 2, p. 5.

<sup>29</sup> Knapp, et al., 2012b, Table 2, p. 5.

<sup>30</sup> Knapp, et al., 2012b.

<sup>31</sup> Aud et al., 2012; National Center for Education Statistics, 2012.

<sup>32</sup> Douglass, 2012; Willen, 2010.

<sup>33</sup> Authors’ calculations, IPEDS. Borrowing rates varied from a low of 3.7 percent in California to a high of 76.6 percent in South Dakota.

<sup>34</sup> College Board, 2011.

<sup>35</sup> College Board, 2011.

<sup>36</sup> Authors’ calculations, IPEDS. Of 1,044 colleges with complete financial data, 81.8 percent (n=854) reported zero additions to endowments and 45.4 percent (n=474) reported zero dollars in gifts. The IPEDS data may not capture philanthropic dollars held by system offices that operate on behalf of the community colleges in many states. State community college foundations conduct private fundraising, manage endowments, and fund scholarships.

<sup>37</sup> Grant, 2009.

<sup>38</sup> Boswell, 2000, 8.

<sup>39</sup> Knapp, et al., 2012a, Table 2, p. 7.

<sup>40</sup> Breneman and Nelson, 1981; Garms, 1981.

<sup>41</sup> Stone, 2002. Rational policy analysis contrasts with critical policy analysis, which focuses on financial resources and on issues of power, voice, stratification, cultural reproduction, and oppression.

<sup>42</sup> Paulsen and Smart, 2001, 96.

<sup>43</sup> Ibid., 53.

<sup>44</sup> Dowd, 2003.

<sup>45</sup> DesJardins, 2003, 206; Rodriguez, 2004, 8.

<sup>46</sup> Monk, 1990; Odden and Picus, 2008.

<sup>47</sup> Rhoads and Valadez, 1996.

<sup>48</sup> Doyle, 2007.

<sup>49</sup> Bragg, 2001.

<sup>50</sup> Dowd, Cheslock, and Melguizo, 2008.

<sup>51</sup> Doyle, 2007.

<sup>52</sup> A task force created by the California Community Colleges Chancellor’s Office recommended legislative reforms to improve access and outcomes for students in the system. The demand for community college enrollment currently exceeds the supply. Students are closed out of classes and forbidden to submit transfer applications to the California State University. These reforms included giving enrollment priority to students whose credit accumulation history demonstrated steady academic progress. This recommendation became law in 2012, effectively rationing access.

<sup>53</sup> Baker and Friedman-Nimz, 2003, 525.

<sup>54</sup> Versteegen, 1998.

<sup>55</sup> Dowd, 2004; Dowd and Grant, 2006.

<sup>56</sup> Titus, 2006.

<sup>57</sup> DesJardins, 2003; Dowd, 2003; Paulsen and Toutkoushian, 2008.

<sup>58</sup> Dowd, 2003.

<sup>59</sup> Birnbaum, 2000.

<sup>60</sup> Dougherty, et al., 2013; Dougherty, et al., 2012.

<sup>61</sup> Dougherty and Natow, 2009.

<sup>62</sup> Dowd, 2005; Dowd and Tong, 2007.

<sup>63</sup> Dowd, Malcom, Nakamoto, and Bensimon, 2012.

<sup>64</sup> Anderson, Alfonso, and Sun, 2006.

<sup>65</sup> Hurlburt and Kirshstein, 2012; Mullin, 2011.

<sup>66</sup> Hurlburt and Kirshstein, 2012.

<sup>67</sup> California Postsecondary Education Commission, 2010.

<sup>68</sup> See, for example, Melguizo and Dowd, 2009; Melguizo, Kienzl, and Alfonso, 2012.

<sup>69</sup> Heller, 2005.

<sup>70</sup> <http://www.sac.edu/StudentServices/SantaAnaAdelante/Pages/default.aspx> and <http://www.longbeach-collegepromise.org>.

<sup>71</sup> American Association of Collegiate Registrars and Admission Officers, n.d.; Roksa and Keith, 2008.

<sup>72</sup> Long, 2005. At one time the federal government provided SMART Grants to transfer students who met certain curricular requirements, but this legislation expired.

<sup>73</sup> Wong, 1994.

<sup>74</sup> Dowd, Malcom, and Macias, 2010; Malcom, Dowd, and Yu, 2010.

<sup>75</sup> Dowd et al., 2010.

<sup>76</sup> Dowd, 2002.

- <sup>77</sup> Harmon and Bustillos, 2012; Jacobs, 2012.
- <sup>78</sup> Trow, 1996, 2.
- <sup>79</sup> Burke, 2005; Trow, 1996.
- <sup>80</sup> Burke, 2005.
- <sup>81</sup> Alexander, 2000; Bailey, Jenkins, and Leinbach, 2006; Burke, 2005; Burke and Serban, 1998; Clotfelter, 2012; Dowd, 2003; Dowd and Tong, 2007; Harbour and Jaquette, 2007; Leveille, 2005; Pusser, 2011.
- <sup>82</sup> Dougherty et al., 2013; Dougherty et al., 2012; Dougherty et al., 2011; Miao, 2012.
- <sup>83</sup> Pusser, 2011.
- <sup>84</sup> Ibid.
- <sup>85</sup> Dowd, 2008.
- <sup>86</sup> Ibid.
- <sup>87</sup> Dougherty et al., 2012; Jones and Snyder, 2012.
- <sup>88</sup> Jones and Snyder, 2012.
- <sup>89</sup> Schaper, 2011.
- <sup>90</sup> Burke, 2005b.
- <sup>91</sup> Conner and Rabovsky, 2011; Dougherty and Hong, 2006; Dougherty et al., 2013; Dougherty et al., 2011.
- <sup>92</sup> Dougherty and Reddy, 2011.
- <sup>93</sup> Notable exceptions include South Carolina, which allocated up to 38 percent through PF in FY 1999, and Ohio, which is expected to increase the share of appropriations allocated based on performance measures from five to 30 percent between in 2012 and 2015 (Dougherty, et al., 2011; Miao, 2012).
- <sup>94</sup> Chase, Dowd, Bordoloi-Pazich, and Bensimon, in press; Dougherty, Natow, Hare, Jones, and Vega, 2011.
- <sup>95</sup> Dougherty and Bakia, 2000; Lattimore, D'Amico, and Hancock, 2012.
- <sup>96</sup> United States Department of Education, n.d.
- <sup>97</sup> The Institute for College Access and Success, 2011.
- <sup>98</sup> Bailey and Xu, 2012.
- <sup>99</sup> Pusser, 2012 observes that students do not hold sway as consumers of the products and services of elite universities because they remain in competition with each other for prestigious positions.
- <sup>100</sup> Gould, April, 2012.
- <sup>101</sup> Polkinghorne, 2004.
- <sup>102</sup> Baldwin, Bensimon, Dowd, and Kleiman, 2011; Bensimon, Rueda, Dowd, and Harris III, 2007; Dowd, 2005; Dowd and Tong, 2007.
- <sup>103</sup> O'Loughlin, 1990.
- <sup>104</sup> Council for Higher Education Accreditation, n.d.
- <sup>105</sup> Dowd and Tong, 2007; Polkinghorne, 2004.
- <sup>106</sup> Patel, 2012.
- <sup>107</sup> Dougherty and Reddy, 2011.
- <sup>108</sup> Clotfelter, 2012.
- <sup>109</sup> Witham and Bensimon, 2012.
- <sup>110</sup> Bensimon et al., 2012; Chase, Bensimon, Shieh, Jones, and Dowd, in press; Dowd, Sawatzky, Rall, and Bensimon, in press.
- <sup>111</sup> Bensimon and Malcom, 2012.
- <sup>112</sup> The Research and Planning Group for California Community Colleges, 2007.
- <sup>113</sup> Dowd, 2008.
- <sup>114</sup> Bensimon and Dowd, 2009; Bensimon, Dowd, Alford, and Trapp, 2007; Bensimon, Dowd, Daniels III, and Walden, 2010; Bensimon and Malcom, 2012; Dowd, Bishop, Bensimon, and Witham, 2011.
- <sup>115</sup> Salazar-Romo, 2009; Subramaniam, 2012.
- <sup>116</sup> Rhoades, 2012.
- <sup>117</sup> Pusser, 2011.
- <sup>118</sup> David Longanecker, executive director of the Western Interstate Commission for Higher Education, provided this insight in a personal communication.
- <sup>119</sup> Dowd, 2008.

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