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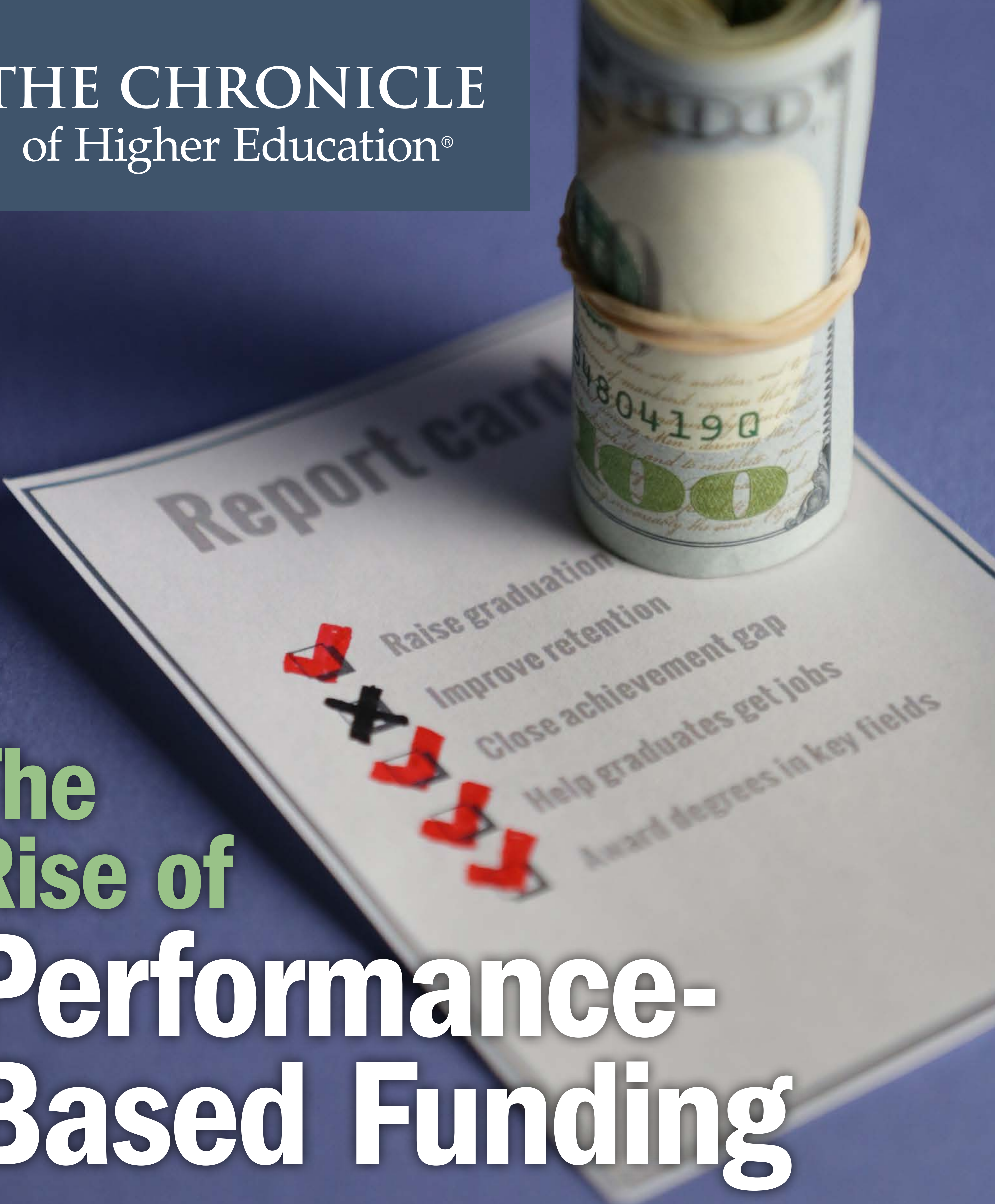

The Rise of Performance-Based Funding

How Colleges Are Adapting in the New Age of Accountability

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About the Author

Eric Kelderman, a senior reporter at *The Chronicle of Higher Education*, focuses on federal and state policy, the future of public higher education, and accreditation. He speaks regularly about these issues at higher-education conferences and in broadcast-media interviews. He also occasionally covers legal issues and music for *The Chronicle*.

In 2010, Kelderman was part of a team of *Chronicle* reporters that won first prize from the Education Writers Association for a series of articles about philanthropy's influence on higher education. He joined *The Chronicle* in 2008 from Stateline.org, at the time a project of the Pew Research Center. He also covered education and state politics for the Gazette newspapers, in Montgomery County, Md.

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Cover photo by Julia Schmalz

GWENDA KACZOR

INTRODUCTION

IT SOUNDS logical, simple, even: To improve higher education, give more state money to public colleges that perform well on a number of desired outcomes, such as credit completion or graduation rates and retention. Colleges with strong results will be rewarded, the argument goes, and those that don't will try to copy their more-successful peers.

More than 30 states across the country are now taking that approach, called "performance-based funding" or "outcomes-based funding," and others are considering it, notes a report by the National Conference of State Legislatures.

This is hardly a new trend: Tennessee first used such a policy in the late 1970s, and by 2000, nearly 20 states had some basic formula to award small amounts of money to public colleges that improved on basic measures, such as graduation rates, according to a paper from The Century Foundation.

Some states later abandoned those efforts as ineffective or politically unpopular. More recently, though, a larger wave of states has latched onto performance-based formulas as a way to spur accountability in higher education and, they hope, improve job prospects for graduates. The policy has grown more popular since the 2008 financial crisis, when states faced widespread economic uncertainty and budget shortfalls. With scarce resources, policy makers have tried to ensure that every state dollar is used efficiently. Meanwhile, state and national lawmakers across the political spectrum have been emphasizing the importance of college completion as a pathway to a good job.

A formula based on measurable outcomes is also meant to remove the politics from a budget process that has historically awarded more money to colleges based on simple measures like enrollment — or, worse, how much political sway the colleges have with elected officials.

Of course, little if anything in public policy works simply, and performance-based funding is no exception. The amount of money designated by lawmakers for awarding good outcomes is an important factor in how the formula works — or doesn't. Elected officials who are reluctant to cut money to colleges in their own districts may design a formula that maintains the status quo, providing no good incentive for change. Or the amount of money dedicated to rewarding improvements may be too little to move a college to make significant changes. Or a college may make the desired improvements, but the state fails to make good on its promises. If the budget pie shrinks, for example, a college could improve on its benchmarks and still lose state appropriations.

> **Does performance mean enrolling more low-income students or students of color? "That's the performance I would like to see rewarded."**

The formula's design also can create unintended consequences. Lawmakers with limited knowledge of higher education might approve a plan with narrow goals that places certain students or colleges at a disadvantage. A poorly designed formula can create incentives for colleges to "game" the system by being more selective in admissions, thus shutting out low-income, first-generation, or minority students. Pressures to raise completion rates can tempt colleges to lower academic standards.

To be sure, there are rewards for some performance-based plans: The better-designed formulas include measures for increasing diversity and serving disadvantaged students. Some colleges have made changes that both improved their performance and increased the amount of money they receive. And some states have adjusted their plans to address the unintended problems or better reflect their colleges' needs.

But even in the best cases, institutions must think hard about how to preserve their missions while adjusting to new realities. In states where metrics are already being used to determine appropriations, colleges need to rely on data for decision-making and to lobby for any necessary changes to the formula. Most important, higher-education leaders and faculty members alike

need to resist making changes that may raise appropriations but sacrifice the college access and success of disadvantaged students.

College leaders and advocates, then, have a difficult balancing act: They must communicate the possible risks and rewards of these funding models while also respecting policy makers' demands for accountability in the face of limited resources.

"Is performance graduation rates? Because if it is, then we'd be more concerned about that than the flagship university," says Joe Garcia, president of the Colorado Community College system. "Is performance enrolling more low-income or students of color? That's the performance I would like to see rewarded, because I think that's where our greatest gaps are in the state," he says. "So, everybody would say, Yes, we agree with performance funding, but we would define it differently."

This report offers college leaders and policy makers practical advice, historical context, case studies, data, and other resources to help navigate the intricacies of such funding models. Despite its flaws, performance-based funding is on the rise. Knowing how to work within the system (not to mention working the system itself, as some experts put it) can improve your chances of success.

SECTION 1

Support for performance-based funding has spread among state lawmakers nationwide. Tennessee was an early adopter; its State Capitol is pictured here.

DEPOSITPHOTOS

The Age of Accountability

TAKEAWAYS

Lawmakers are seeking to get the most from public dollars spent on higher education.

Rising enrollment and demand for college degrees have put financial pressure on states and public colleges to improve retention and graduation rates.

While past funding models have rewarded enrollment, newer models reward specific performance goals.

How much money should states allocate to public colleges, and on what basis? Those questions have become crucial for policy makers and campus leaders over the past three decades, as state spending on higher education has failed to keep pace with enrollment and the growing demand for college credentials.

One increasingly popular response has been to base at least a portion of the colleges' state support on how well they achieve a measurable set of goals, such as degree and credit completion or job placement for graduates. The drive to base appropriations on specific outcomes has come from a wide range of stakeholders, including business groups, elected officials, and even leaders of colleges and state higher-education systems themselves.

Those seeking to adopt and comply with effective performance-based policies need to understand the diverse and often competing interests — and the history — behind them. Until the late 20th century, states appropriated money to public colleges based roughly on each institution's fixed costs. The amount increased or decreased along with states' budgets or politicians' whims, according to a study written by James C. Hearn, a professor of higher education at the University of Georgia.

That model worked, in part because institutional costs grew slowly. Demand for a college education was lower than it is now, as was the expectation that a student who enrolled in college would need a degree to get a decent job. The downside, however, was that inequities in appropriations became entrenched over time: politically popular flagships, with higher costs, got more money than less-prestigious regional campuses did.

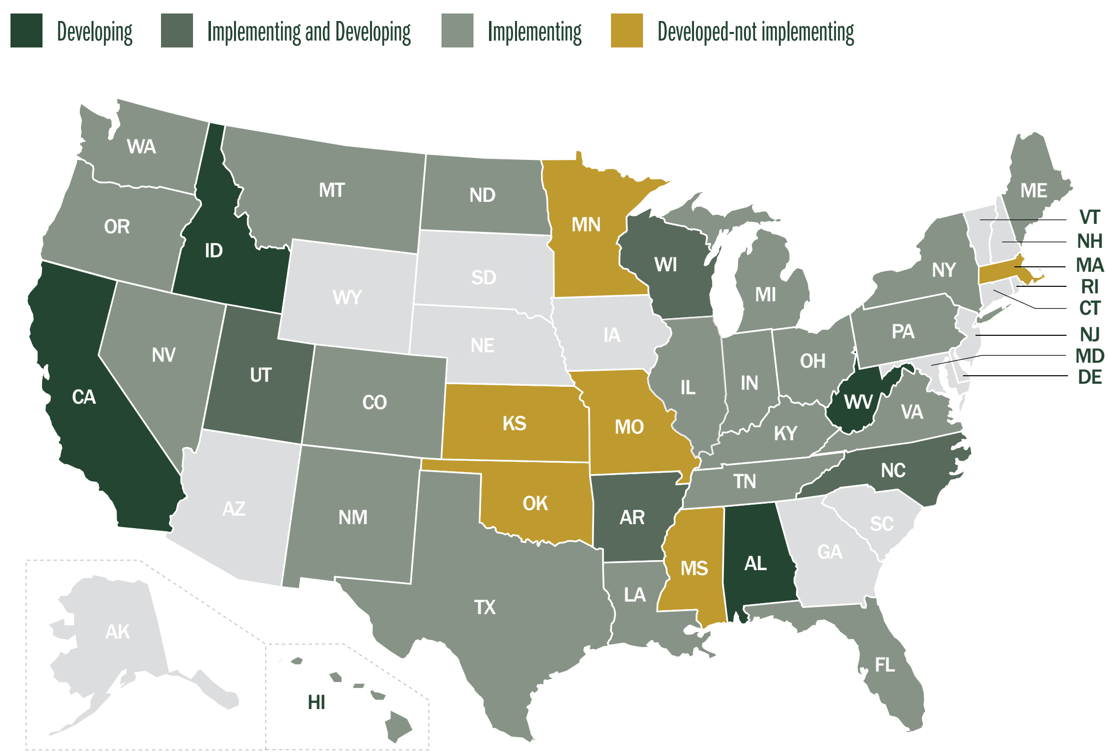
States began to take a different approach in the 1960s and 70s, when the baby boomers started arriving on campus. To better reflect the growing demand for college, some states began to base appropriations on enrollment, although, as Hearn's study explains, those formulas still did not consider the need for students to complete a degree.

A New Funding Model Takes Root

In 1979, Tennessee set the stage for a new funding formula. Lawmakers there decided to award a small portion of tax dollars to higher education based on a few performance goals. It took 14 more years for more states to join that experiment. By 2000, nearly 20 of them had put in place some form of performance funding, often motivated by a partisan appeal for limited government and accountability for spending tax dollars.

FIG. 1: MANY STATES HAVE ADOPTED SOME FORM OF OUTCOMES-BASED FUNDING

This map depicts state policies as of January 2018. States frequently revise existing funding policies and consider new ones.



Source: HCM Strategists

As Republicans gained control of more legislatures, state oversight of higher education increased, says Kevin Dougherty, a professor of higher education and education policy at Teachers College of Columbia University.

Scott Boelscher, a higher-education consultant with HCM Strategists, says the early performance-based funding models had several flaws and eventually fell out of favor. They included too many metrics or had unclear goals, he says. In addition, the plans weren't directly tied to student success, and they applied to only a small percentage of state appropriations.

The Recession Takes Its Toll on Colleges

A more recent wave of outcomes-based funding spread as the effects of the 2008 recession on state revenues became apparent. The renewed interest in such policies was a response to the twin pressures of the economic downturn and a growing recognition that workers needed some kind of postsecondary credential to get a good job.

The recession, meanwhile, also led to a big increase in college enrollment, as typically happens during economic downturns. That put more pressure on higher-education budgets, and the national average of per-student appropriations dropped to a 25-year low.

Tiffany Jones, director of higher-education policy at the Education Trust, a nonprofit advocacy group for disadvantaged and underrepresented students, recalls the policy discussions of that period: "We're thinking about how to spend an ever-shrinking pot on higher-ed institutions, which, in that context, means that state decisions about how to disburse that money matter now more than ever." At the same time, the public was growing skeptical about the price and value of a college degree, she says.

President Barack Obama also put a spotlight on student performance by setting a national goal: The United States should lead the world in college completion by 2020, he said in his first speech to a joint session of Congress, in 2009.

By then, several advocacy groups had already begun national campaigns to encourage states to set similar goals. Among them were the Lumina Foundation and Complete College America, which was headed by a former state Indiana state legislator, the late Stan Jones.

> **"Legislators tend to both love and hate the formula.... They hate the formula because they'll say, 'Yes, we are for performance, but what happened to my local institution?'"**

What Do Legislators Want? Reassurance

The recent trend of performance-based funding appeals to lawmakers seeking reassurance that higher education will benefit their constituents, says Ben Boggs, an education expert with the nonpartisan National Conference of State Legislatures. "They are saying to colleges: 'We need help, we are giving you a lot of money and want to see what you are doing with it.'"

Legislators also appreciate applying some rational thinking to the appropriations process, by removing (in theory, at least) the political haggling that often accompanies budget season.

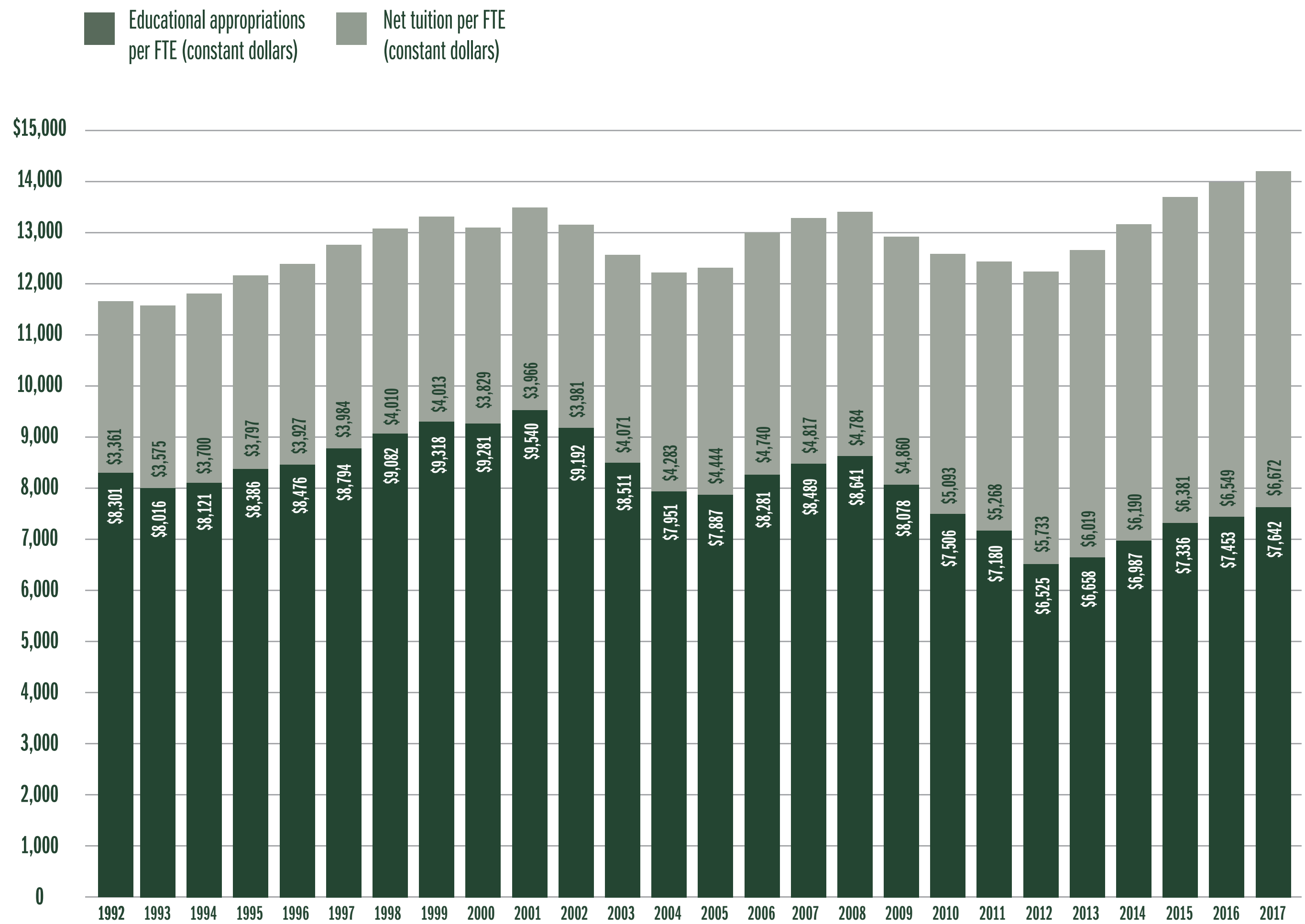
"Legislators tend to both love and hate the formula," says Kim Hunter Reed, Louisiana's commissioner of higher education. "They love the formula because they can say, 'I can't give you a line-item appropriation — this is how it works.'" But there are possible drawbacks as well. "They hate the formula because they'll say, 'Yes, we are for performance, but what happened to my local institution?'"

One of the earliest states to enact this approach was Indiana, in the 2010 fiscal year. "That was not a pleasant time," says Rep. Bob Behning, a Republican in Indiana's House of Representatives, because the state budget was not able to keep pace with the state's needs.

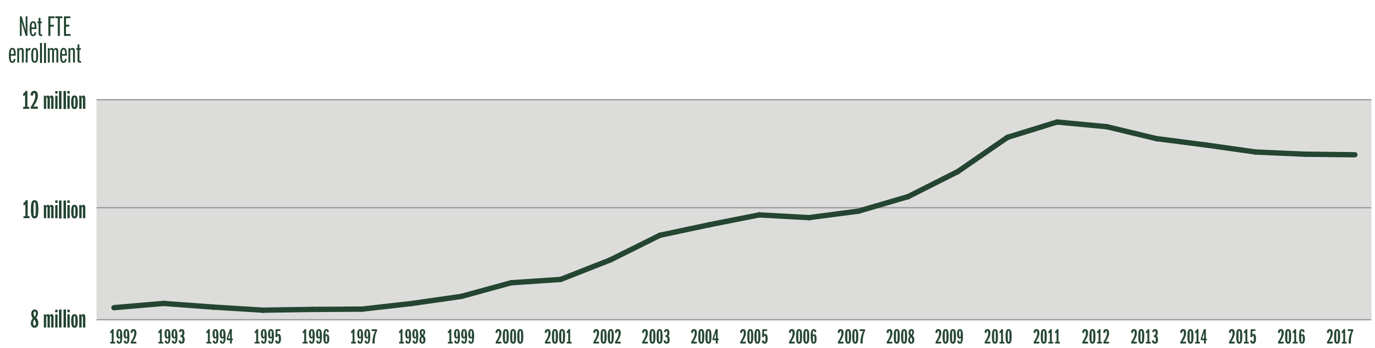
Even as tax coffers were taking a hit, lawmakers wanted to give public colleges an incentive to improve completion rates so that students would graduate on time and with the

FIG. 2: TUITION REVENUE GROWS AS STATE MONEY PER STUDENT SHRINKS

These tables show the relationship between full-time-equivalent enrollment and revenue, and the impact of the economy over time. The revenue colleges receive from tuition per FTE has grown, while state appropriations per FTE have fallen.



Meanwhile, FTE enrollment has risen steadily, before leveling off in recent years.



Source: State Higher Education Executive Officers, "State Higher Education Finance" report, fiscal 2017 skills needed to repay any loans, Behning recalls. “There’s limited value for a student who leaves with no degree and a lot of debt,” he says.

Tennessee Breaks New Ground

In Tennessee, one of the key groups pressing for better college outcomes was the state’s business community. The Chamber of Commerce had given the state’s education system a low grade, says Kenyatta Lovett, director of the nonprofit group Complete Tennessee. Such a designation can make it harder to attract new businesses and retain existing ones.

In 2010, then-Gov. Phil Bredesen, a Democrat, proposed new performance-funding measures as part of a broader set of statewide policies meant to improve student performance. The bill came 31 years after Tennessee had enacted an earlier, narrower kind of performance-based funding, which awarded only a small amount of new money for meeting benchmarks. The new plan, which emphasized degree completion, applied to nearly all state appropriations made to public colleges.

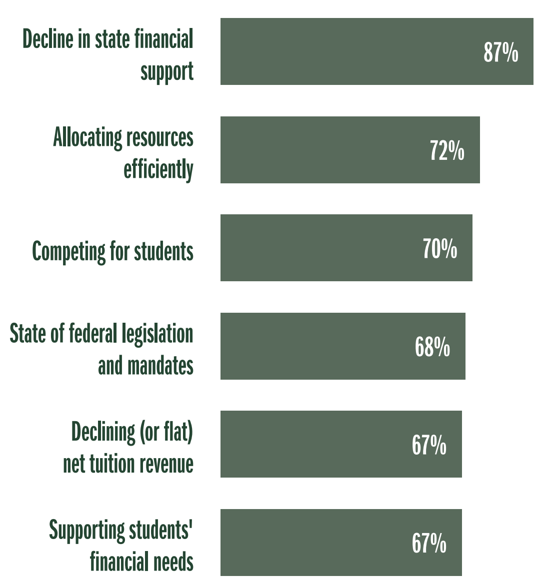
The Complete College Tennessee Act, which passed that year, included requirements for a statewide higher-education master plan that would unify the state’s community colleges under one system, streamline transfers

> “There’s limited value for a student who leaves with no degree and a lot of debt.”

between two- and four-year public colleges, and increase dual-enrollment options for high-school students. Until that legislation passed, “there was no real sense of urgency to improve college performance,” Lovett says. “That moment somehow created a new urgency within Tennessee to make us look different than other states in the South.”

FIG.3: TOP PUBLIC-FUNDING CHALLENGES CITED BY ACADEMIC LEADERS

Academic leaders were asked to rank top challenges related to public funding. Their responses are listed by frequency.



Source: “Making Way for Innovation,” based on a 2017 survey of academic leaders conducted for *The Chronicle* by Maguire Associates

A ‘Spoonful of Sugar’ in Oregon

While public colleges across the nation risk losing some tax dollars under performance-based formulas, some institutions have also found reason to support this new approach, seeking more stability and a greater measure of control over their own appropriations.

Oregon’s performance-funding measure was part of an informal deal that gave public colleges an immediate increase in appropriations and more autonomy in spending that money, says Ben Cannon, executive director of the state’s Higher Education Coordinating Commission. Those incentives served, in effect, as a spoonful of sugar to help the medicine go down, he says.

“So there were new dollars on the table,” Cannon explains, “and that helped us succeed in putting in place a new formula that by its nature could be perceived as creating winners and losers.”

An HBCU Struggles With the State's Funding Formula

Tennessee State University has increased the number of bachelor's degrees it awards — one of the key metrics the state uses in its performance-based budget calculations. But the historically black university has fallen behind on other performance measures, such as research spending and the number of doctorates awarded.

As a result, appropriations for Tennessee State have risen 8 percent since 2010, while state money for the other public four-year universities has grown by 25 percent in the same period, according to an analysis by the state comptroller. And most of the increase for Tennessee State has come after the 2017 fiscal year.

In one sense, this is how Tennessee's performance-based funding plan is supposed to work, says Steven Gentile, associate chief fiscal officer on the state's Higher Education Commission. But the university's experience also shows how difficult it can be for some institutions to reap the rewards of a performance-funding formula. The reasons are complex, reflecting the lower academic readiness and financial status of students at Tennessee State, as well as the university's decisions about which of the state's metrics to focus on.

Under Tennessee's performance-based funding plan, public colleges themselves decide how much weight to assign each of nine metrics, such as the number of students who reach 30 credits, earn a bachelor's degree, or graduate within six years.

In some cases, Tennessee State has chosen to give more weight to measures that reflect decline, and less to those that reflect improvements, the state comptroller's analysis found. But even when an institution improves on a particular measure, it gets a smaller financial award from the state if other universities improve even more.

"Institutions with greater increases on outcome measures relative to other institutions will receive a higher share of funding," the analysis says.

Laurence Pendleton, the university's general counsel, says a bigger problem is that the open-enrollment institution is at a disadvantage because of the challenges its students face. Three-quarters of undergraduates are black, and nearly 60 percent qualify as low-income.

"We are a historically black college," says Achintya Ray, a professor of economics. "Let's think about all the headwinds we are facing."

The formula has a similar impact on on other minority-serving institutions in the state, according to a study by Nicholas Hillman, an associate professor of educational leadership and policy analysis at the University of Wisconsin at Madison.

Three in four black undergraduates attend colleges with below-average budgetary growth under their states' models, he found.

Ray says it's impossible to know if the performance-based formula

TENNESSEE STATE UNIVERSITY

"We are a historically black college," says Achintya Ray, a professor of economics at Tennessee State U., where nearly 60 percent of the students are low-income. "Let's think about all the headwinds we are facing."

is responsible for the increase in the number of students graduating. The state has encouraged many more students, both high-school graduates and adult learners, to go to community college through the Tennessee Promise program, he notes. And the state has joined with Western Governors University, a national online institution, to provide greater access to nontraditional students.

Gentile, from the state's Higher Education Commission, says Tennessee has taken several steps to help minority-serving institutions. The commission now has a staff member dedicated to working with historically black colleges. And the state has given money to Tennessee State to start a summer bridge program for new students.

In fact, there are signs that things are improving for Tennessee State. This year it had the third-highest rate of improvement among public four-year universities, Gentile says.

Pendleton, the general counsel, says the university is proud of its improvements but is working to recruit better-prepared students who will be likelier to graduate. It must also improve its fund raising and form more research partnerships with private companies, he says.

While the university wants to continue to improve under the state formula, Pendleton says, it cannot rely heavily on state appropriations, which are vulnerable to economic downturns.

Overall state appropriations, per student, fell by nearly $3,000 from 2008 to 2012, according to figures from the State Higher Education Executive Officers.

"We've gone from being state-supported," Pendleton says, "to state-assisted."

> "There were new dollars on the table, and that helped us succeed in putting in place a new formula that by its nature could be perceived as creating winners and losers."

A Rocky Start in Colorado

Colorado enacted performance-based funding as an antidote to its College Opportunity Fund — a state stipend for tuition that follows students to the public college of their choice, says Joe Garcia, chancellor of the state's community-college system. The COF plan, as it is known, was meant to shift state appropriations to institutions that attracted the most students. But it has not adequately rewarded colleges that grow in enrollment, says Garcia. "There were some that had been losing enrollment, some that were gaining, but the money didn't really change."

College presidents and policy makers have been in discussions about making changes in the performance-based funding, Garcia says. But calling Colorado's appropriation formula "performance-based" is only partly accurate, he argues. Like most states with such funding plans, Colorado still allocates the bulk of its appropriations on the basis of enrollment.

SECTION 2

MICHAEL SHUM, GETTY IMAGES

Goals and Realities

A PERFORMANCE-BASED FUNDING formula is meant to provide some rational basis for giving state-tax dollars to colleges in a way that rewards them for meeting certain goals, usually related to student achievement. But creating any funding plan is also a political exercise that seeks to balance policy makers' demands with the interests of their state's colleges. As a result, formulas vary widely from state to state, reflecting the political climate and higher-education needs of each one. Only a few states are using a wide range of measures to define success, or committing more than 25 percent of higher-education appropriations to such a formula. Even so, colleges have recently started developing a variety of best practices.

TAKEAWAYS

Lawmakers should set the broad parameters of performance-based funding plans but leave details to higher-education officials.

States' formulas vary widely, and only a few are considered by experts to use the best available metrics.

Colleges focus on an emerging set of best practices to support student success.

Designing an Effective Plan

State legislators are responsible for putting performance-based funding into law, but higher-education experts agree that lawmakers' involvement in designing a plan should be limited. One proven strategy is to let them set broad parameters, while state higher-education executives and representatives of individual colleges weigh and decide on the details.

Lawmakers, for example, could set the timeline for putting the formula in place, determine how much money will be allocated through the plan, and appoint a group to provide oversight of the formula, says Martha Snyder, a senior director at HCM Strategists.

"The best-designed outcomes-based policies, as well as those that are most sustained over time, leave a lot of details to stakeholders," she says. The most effective ones are not "micromanaged from the legislative branch."

Lawmakers may not be thinking about how different incentives might affect sectors of public higher education. If they settle on a formula that rewards only graduation rates, for example, they may not realize that such a metric will benefit a college that already has a high graduation rate, while taking resources from a college that requires more money to improve its student outcomes.

In states where lawmakers have made it a practice to consult with colleges, "the formula was much more nuanced and took into account differences in institutional mission," says Kevin Dougherty, the Columbia higher-education scholar.

Tennessee provides a good example of how this process can work: The law that requires an outcomes-based formula is consistent with the master plan for higher education. But it gives the state's Higher Education Commission authority over nearly the entire process, says Russ Deaton, who led the commission when the formula was put into place. He is now executive vice chancellor for strategy and research at the Tennessee Board of Regents.

After the law was passed, in 2010, the Tennessee commission established a formula-review committee that included faculty members and administrators of public colleges as well as commission staff members and officials from other state agencies. The panel held a half-dozen formal meetings and several town halls across the state to listen to concerns and recommendations.

It didn't, however, immediately start hashing out the details of how dollars would flow to colleges. "When we first gathered the committee," Deaton says, "I didn't ask them to think about numbers. We started with philosophical principles."

Policy makers in Oregon used a similar approach, says Ben Cannon, chairman of the state's Higher Education Coordinating Commission. They started with principles that included emphasizing disadvantaged students, increasing the number of high-demand, high-reward degrees, and recognizing that institutional missions are different.

> **"The best-designed outcomes-based policies, as well as those that are most sustained over time, leave a lot of details to stakeholders."**

After deciding on broad goals, policy makers appointed to design the formula can choose a more specific set of performance outcomes and then weight them for different types of colleges, says Scott Boelscher, of HCM Strategists. Existing data can be used to model what effects the formula would have had in the past, or to project future outcomes, he says.

Specific metrics for the Oregon formula had outcomes with clearly defined and available data, Cannon says: "We weren't going to build a formula around things that can't be measured."

How States Define Success

Some commonalities are emerging in how states put performance funding into effect, but the results have been variable. HCM Strategists, which has studied the range of approaches that states are taking, categorized the formulas into four groups, based on their level of sophistication.

At their simplest, these plans consider the number of credits completed or degrees earned. North Dakota, for example, appropriates money to its public colleges only according to the number of credits that students complete.

At the next level, states consider a total number of degrees or credentials, not just graduation rates, which can be more easily manipulated by raising acceptance standards, for instance. In this category, states are not giving any consideration of the colleges' missions.

Some of the characteristics for the two highest categories, according to HCM's analysis, include consideration of a college's mission to adjust for the varying costs of operation. A regional comprehensive university, for example, would be evaluated differently than a research university would. Advanced formulas can also include measures to reward colleges for the academic progress and graduation rates of their minority or low-income students.

A few states also consider the affordability of a college education and even how students fare in the work force after completing a degree or job certificate. Eight states use job data to evaluate two-year colleges; three states consider those data for four-year institutions.

Of the 30 states that used performance funding or were planning to do so in 2018, the formulas of only seven were included in HCM's highest category for two- or four-year colleges. (The seven were Colorado, Louisiana, Maine,

> **"We weren't going to build a formula around things that can't be measured."**

Nevada, Ohio, Oregon, and Tennessee.) Those states also were among the few that allocated more than 25 percent of their appropriations through performance-funding plans.

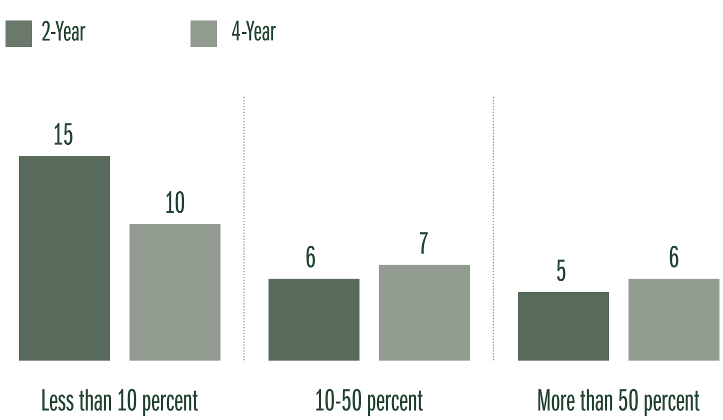
"You can call all these policies outcomes-based funding, but they're all quite different," says Kathleen M. Shaw, executive director of Research for Action, a nonprofit think tank, which has studied performance funding in six states. As a result, it's difficult for policy makers considering a new funding formula to know what will work in their states, she says.

Other factors to consider when putting a new formula in place include the need for measures to temporarily prevent an immediate loss of state money among colleges that would be most damaged by the formula. For example, most states give colleges a "hold-harmless" period of a few years to report results before the formula is applied to their state appropriations.

To further prevent volatility, many states use rolling averages of performance metrics, so that a single bad year in one measure doesn't cause a big swing in a

FIG. 4: PERCENTAGE OF STATE SUPPORT ALLOCATED THROUGH OUTCOMES-BASED FUNDING

Most states with the plans allocate less than 10 percent of their support through such formulas.



Source: SHEEO "State Higher Education Finance" report, fiscal 2017 college's appropriations. Some states also limit the percentage by which a college's state allocations can vary from year to year.

Finally, a crucial part of a new funding plan has to do with how states build in opportunities for both short-term and long-term changes. In Tennessee, for example, the Formula Review Committee meets annually to consider changes in the funding plan. But the state's Higher Education Commission, which is in charge of approving those changes, sets a five-year window for major revisions.

Some short-term changes may be necessary to correct dire unintended consequences or any gaming of the plan by colleges. But states must also be mindful, Shaw adds, that it takes time to see the results of a new funding plan, or changes in an existing plan.

How Colleges Plan to Improve

With state funding on the line, Dougherty, the Columbia researcher, says colleges are responding to performance plans by seeking improvements in four areas of operation: institutional research, instructional and curriculum changes, student-support services, and recruitment and financial aid. Here are some of the key strategies often mentioned by colleges that must meet state mandates:

•**Be Informed.** First is the need to collect good data, so college leaders can deeply understand their students. "A good institutional-research office will sit down with leaders to readjust priorities and look at evidence-based solutions," says Shaw, of Research for Action.

FIG. 5: HOW 4 STATES MEASURE SUCCESS

This table shows some of the performance-based funding metrics used in four states.

4-Year 2-Year

Outcome	Colorado	Louisiana	Oregon	Tennessee
Course completions	2-Year	4-Year, 2-Year	4-Year	2-Year
Progression	4-Year, 2-Year	4-Year, 2-Year		4-Year, 2-Year
Completion of degrees or certificates	4-Year, 2-Year	4-Year, 2-Year	4-Year	4-Year, 2-Year
Efficiency	4-Year, 2-Year	4-Year, 2-Year		4-Year, 2-Year
Research/public service		4-Year		4-Year
Job placement or wages after completion		4-Year, 2-Year		2-Year
Credentials awarded in high-demand fields	4-Year, 2-Year	4-Year, 2-Year	4-Year	
Performance of disadvantaged student groups	4-Year, 2-Year	4-Year, 2-Year	4-Year	4-Year, 2-Year

Note: "Progression" refers to students' having reached certain credit-hour benchmarks. Plans use various metrics to evaluate "efficiency," but the term generally has to do with the proportion of full-time-equivalent students earning degrees or certificates.

Source: HCM Strategists

Good data can also lead to solutions to problems that might not turn up in the research literature, Shaw says, like adding additional sections of a required course to prevent a bottleneck for students who need it to graduate on time.

• **Improve Instruction.** One of the strategies most often mentioned is the elimination of traditional remedial courses, especially in mathematics and English. Credits for those courses, which don't apply toward a degree, have become a stumbling block for underprepared students. Instead, states including Tennessee have moved to a "corequisite" model, in which students take a college-level course and get extra help along the way. This idea, while gaining ground, also has its critics, and the jury is still out on how effective it is.

The creation of guided pathways — degree programs that give students few or no options for elective courses — is another popular way to get more students to complete their programs on time. At Northwest Louisiana Technical College, such programs are being retooled with the needs of regional employers in mind, says DeDe Griffith, chief of academic and student affairs.

• **Offer Students More Academic Support.** Outside of the classroom, colleges are taking steps to keep students better engaged and better informed, in efforts to keep them from falling behind academically.

Some colleges begin the process well before classes start, by seeking improvements in the design and attendance of orientation programs for first-year students, says Amy Li, an assistant professor of higher education at the University of Northern Colorado.

Mentorship programs are also on the rise at colleges in states with performance-based funding, says Li. When students arrive, "they get a peer and faculty adviser to build connections with the campus."

Colleges are strengthening their academic advising, often using technological tools, to reach students early and often when they start to falter in a class, and give them information about how to get help. Some colleges reach out to students by text to remind them of key dates and contacts.

• **Keep Communication Going.** Colleges have worked hard to improve communication about the funding plan both on and off the campus. In Oregon, that communication has taken on a sense of urgency at some smaller institutions, where even a relatively minor change in appropriations can have a major impact. At regional comprehensive colleges, presidents are talking with members of their governing boards and with academic leaders on campus about how the formula works, says Cannon, of the Higher Education Coordinating Commission. "These are places where swings of a few hundred thousand dollars can make a big difference," he says.

In one state, the community colleges used to have a monthly call to share information, "but that effort flagged after the state implemented outcomes-based funding."

In some cases, an emphasis on communication is meant to help colleges better understand the appropriations formula. Louisiana, for example, holds an annual summit for chief finance officers, says Kim Hunter Reed, the state's higher-education commissioner. At the most recent meeting, finance officers also brought along academic leaders from their campuses, she says, so they could also get a better idea of how to improve performance.

Sometimes, however, communication can break down as a result of competition among institutions and the possibility that one college's success could lead to fewer dollars for another. "We've seen examples of colleges being competitive with each other," says Shaw. In one state, the community colleges used to have a monthly call to share information, she says, "but that effort flagged after the state implemented outcomes-based funding."

CASE STUDY: SOUTHERN OREGON UNIVERSITY

When a Good Formula Falls Short

Oregon has a performance-based formula that is considered among the most advanced in the nation.

For example, the state allocates 80 percent of its higher-education spending to four-year public colleges on the basis of course and degree completion. It gives extra weight to student performance in certain fields of study and to the performance of students who are from underrepresented minority groups or rural backgrounds, or are low-income or military veterans. The funding formula was put in place five years ago.

But not all of the state's public universities are satisfied. "It feels like we are getting the short end of the stick," says Gregory Perkinson, vice president for finance and administration at Southern Oregon University.

Southern Oregon's situation is a good example of how even the most carefully designed formulas can have negative consequences for some institutions. In Southern Oregon's case, the problems have a lot to do with its primary mission as a liberal-arts institution, and with its location.

The state's formula rewards the completion of courses and degrees in STEM fields like engineering and in health-care fields like nursing, Perkinson says. But Southern Oregon has long awarded more degrees in business administration, education, and the liberal arts, according to federal data.

Another issue, Perkinson says, is that the state's formula rewards enrollment of Oregon residents. But the university, in Ashland, is located less than 25 miles from the California border and attracts a large number of students from there. Nonresidents made up more than 40 percent of its undergraduates in 2017.

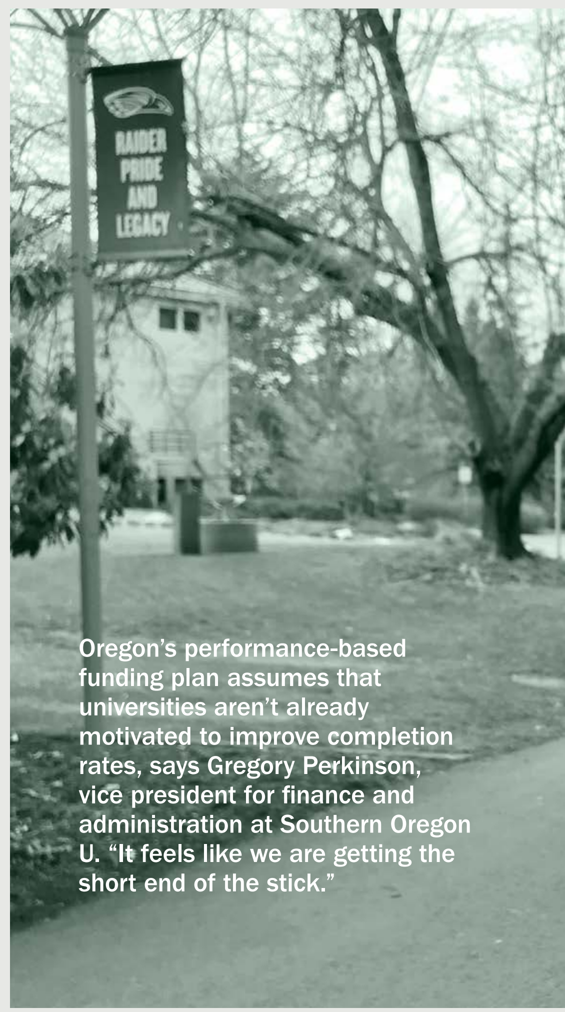
A third issue for Southern Oregon is that a lot of undergraduates transfer to other colleges in the state. About 20 percent of incoming freshmen transfer after their first year, according to Southern Oregon, with about half of that group going to other colleges in the state. Federal data show that more than 40 percent of all students at Southern Oregon eventually transfer to another institution.

But the university pays a price for the students who leave. Southern Oregon gets performance-based dollars only for the courses those students complete on its campus. The receiving university, however, gets more money based on the students' graduating, even if they took the same number of credits at both institutions. "We have a lot of transfers out," Perkinson says, "so then they're not completing here, but they had all the needs and requirements of other students."

The university is trying to reduce the number of students who leave Southern Oregon to complete their degrees elsewhere, says Joe Mosley, Southern Oregon's spokesman.

It recently began coordinating with the Oregon Institute of Technology and two nearby community colleges to align coursework and degree requirements that can be easily transferred between institutions.

"We are attempting to make higher education as seamless as

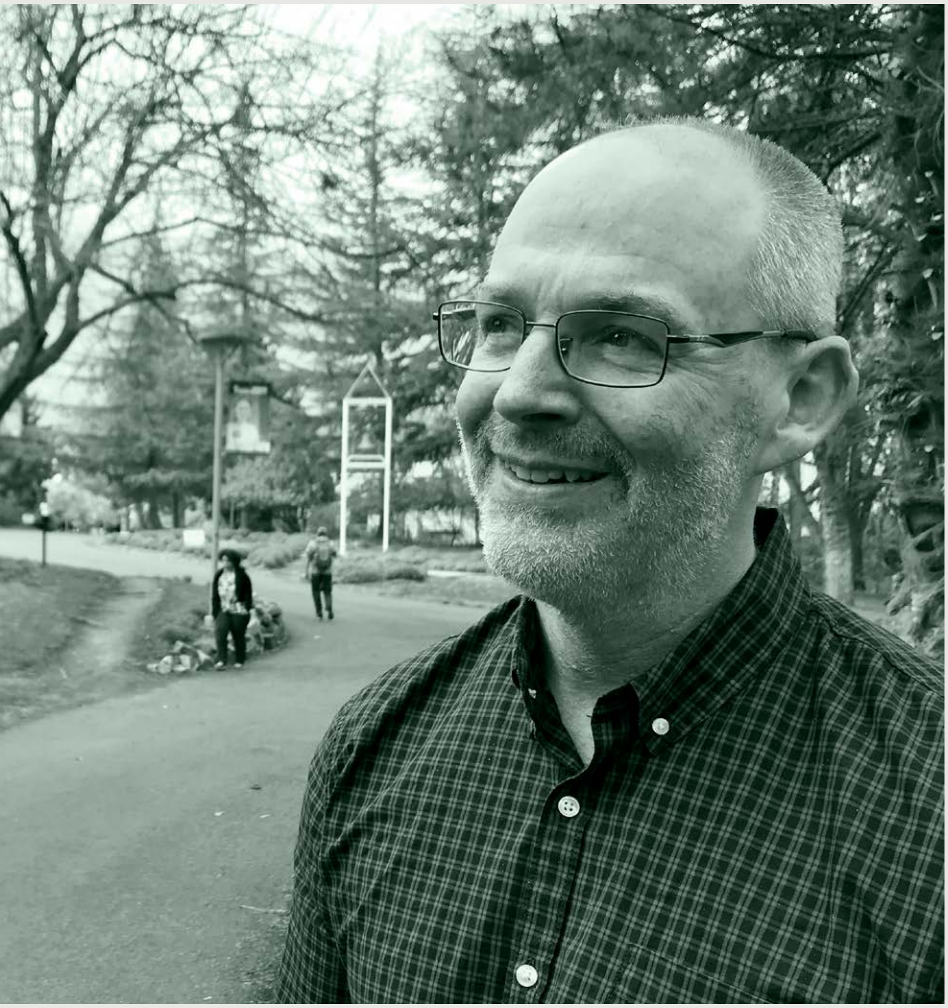


Oregon's performance-based funding plan assumes that universities aren't already motivated to improve completion rates, says Gregory Perkinson, vice president for finance and administration at Southern Oregon U. "It feels like we are getting the short end of the stick."

possible," Mosley says.

Ben Cannon, executive director of Oregon's Higher Education Coordinating Commission, acknowledges that there are flaws in the state's formula that ought to be considered, including how the state awards money for an institution's mission and base costs. Regional comprehensive universities "have to be really careful about their resources," he says. "These are places where swings of a few hundred thousand dollars can make a big difference."

Southern Oregon also has more to gain from increasing the number of students who finish their degrees there in comparison with the larger research universities, like the University of Oregon, which have higher graduation rates, says Cannon. When Southern Oregon did increase the number of students it graduated, it got an extra $400,000 from the state.



SOUTHERN OREGON U.

Andrew Gay, an associate professor of communication at Southern Oregon, says the state's funding formula isn't affecting the everyday lives of faculty members. But some of them worry that students who are undecided about their futures may be pushed into degree programs that they can complete quickly, rather than those they really want to pursue.

The emphasis on STEM fields may actually run counter to the needs of the state's economy, Gay argues. A recent state report found that many employers were looking for workers with the kinds of critical-thinking and other skills that students learn in the liberal arts, he says. A STEM emphasis, he adds, is also demoralizing to some faculty members, like himself, who teach in the liberal arts and feel that their work is not being valued by policy makers.

The real problem with the state's performance-based funding, says Perkinson, is that it assumes that universities aren't already motivated to improve completion rates.

"We have a vision and a mission for the university that is synergistic with the state's goals and especially those students who are underserved," he says. "We're already motivated to do that, so the belief that the model drives that behavior is a false belief.

"What university doesn't want their students to graduate?"

SECTION 3

GETTY IMAGES

How to Build a Better Funding Model

Nearly 10 years after states began a wave of performance-based funding, we don't know whether the policy itself has led to gains in degree completions or even a stronger focus on student success. Variations in how the funding models are put into effect make for difficulty in tying them to any improvements, while some consequences are widely thought to be negative. Still, many states continue to base at least some appropriations on student performance, increasingly as a way to help minority and low-income students. California, which adopted performance-based funding in 2018, did so for the purpose of supporting disadvantaged students.

TAKEAWAYS

Research has not shown a strong link between performance-based funding and student success.

Performance-based funding can have unintended negative consequences, such as lower academic quality and the exclusion of disadvantaged students.

In most states, money from enrollment, including tuition and fees, provides a greater share of revenue than state dollars that reward student outcomes.

Despite the concerns, states are now looking at these models as a way to improve the performance of minority and low-income students.

Does Performance-Based Funding Really Work?

With its rapid growth, such funding has been studied intensively since 2009, both by independent academics and by several think tanks. The findings from various states have been mixed.

Full-time students at two- and four-year colleges showed the most improvements, according to a 2017 analysis of results in Indiana and Tennessee by a team at the nonprofit think tank Research for Action. But in Tennessee, full-time students at four-year colleges were the only group that showed gains for earning degrees within six years.

The same research showed "significant negative impacts on credit accumulation and transfer for all part-time students in Tennessee," while low-income and underrepresented-minority students were "negatively affected" across a range of outcomes.

Kathleen Shaw, one of the authors of that report, says the complexity of the policies requires researchers to avoid generalizing about outcomes-based funding and instead try to distinguish more-effective approaches.

But Nicholas Hillman, an associate professor of educational leadership and policy analysis at the University of Wisconsin at Madison, has argued that the idea of improving higher education through such funding plans is too good to be true. "While pay-for-performance is a compelling concept in theory, it has consistently failed to bear fruit in actual implementation, whether in the higher education context or in other public services," he wrote in a white paper for The Century Foundation.

A 2019 summary of outcomes-based funding policies by Amy Li, the higher-education scholar at the University of Northern Colorado, was just as critical: It concluded that while colleges do try harder to raise the number of students who complete degrees or certificates, "in most current iterations at the state level, the policy fails to improve degree completions and graduation rates."

Fears of Gaming the System

Along with conflicting research results, a number of questionable institutional responses and unintended consequences concern both advocates and opponents of outcomes-based funding. Chief among them is the fear that colleges will lower academic standards in order to create the appearance of improvement in student achievement.

That became a reality in Tennessee, where some community colleges were found to have created credentials with little or no value in the workplace. The colleges simply packaged a series of courses and labeled them as a credential in order to increase their state awards for short-term certificates, according to Kenyatta Lovett, director of the nonprofit Complete Tennessee.

Many colleges went from producing 100 credentials per year to 500 or 600, he says. The state's higher-education commission intervened to prevent any further abuses, he adds.

Kevin Dougherty, the Columbia higher-education scholar, says that while conducting research, he found a university that published a

RESEARCH FOR ACTION

Performance-based funding formulas vary widely among the states that use them. As a result, it's difficult for policy makers to know what will work, says Kathleen M. Shaw, executive director of the think tank Research for Action.

FIG. 6: HOW STATES REWARD COLLEGES FOR HELPING UNDERREPRESENTED STUDENTS

Some states' performance-based funding formulas include "equity metrics," which give colleges incentives to help low-income, minority, and other underrepresented students succeed.

State	2-Year sector	4-Year sector	Equity metrics
Arkansas	Yes	Yes	Minority, low-income, remedial, adult
Colorado	Yes	Yes	Low-income
Florida	Yes	Yes	Low-income
Illinois	Yes	No	Minority, low-income, adult
Indiana	Yes	Yes	Low-income, adult
Kansas	Yes (unfunded)	Yes (unfunded)	
Massachusetts	Yes	Yes	Minority, low-income
Mississippi	Yes	Yes (unfunded)	Remedial
Missouri	Yes	Yes	Low-income (new model)
Montana	Yes	Yes	Minority, low-income, adult, veteran
New Mexico	Yes	Yes	Low-income
New York	Yes	No	
North Dakota	Yes	Yes	
Ohio	Yes	Yes	Minority, low-income, remedial, adult, first generation
Oklahoma	Yes (unfunded)	Yes (unfunded)	Low-income
Tennessee	Yes	Yes	Low-income, remedial, adult
Texas	Yes	No	Remedial
Utah	Yes	Yes	Low-income
Washington	Yes	No	Remedial
Wyoming	Yes	No	

Source: SHEEO "State Higher Education Finance" report, fiscal 2017

list of courses with high dropout rates. "Faculty felt they were being told to make it easier to pass," he says.

In other cases, those fears may still be unfounded. In Oregon, faculty members expressed concerns that the performance-based funding formula would lead to pressure to lower academic standards, says Ben Cannon, chairman of the state's Higher Education Coordinating Commission. "We took that pretty seriously and worked with faculty to monitor for changes in quality," he says. "In four-plus years, we haven't seen or heard any evidence of that occurring."

Another worry is that institutions will simply recruit or enroll those students who are more likely to complete their degrees, leaving minority and low-income students behind. Some community colleges, for example, started recruiting more heavily in suburban areas,

> **Research on performance-based funding suggests that "in most current iterations at the state level, the policy fails to improve degree completions and graduation rates."**

California's Formula Places Equity Over Efficiency

East Los Angeles College is the kind of place where administrators might normally fear performance-based funding.

Like many public two-year colleges in California and nationwide, East Los Angeles enrolls a large number of students who traditionally have low rates of completing college credentials. More than two-thirds of its students are Hispanic, 77 percent attend part time, and 45 percent of full-time students are eligible for Pell Grants.

Just over one-third of first-time, full-time students at East Los Angeles complete an associate degree within eight years, according to federal figures. The proportion is 10 percent for part-time students.

Marvin Martinez, president of East Los Angeles, supports the state's new funding formula for higher education, which became law in 2018, and was designed to support colleges like his. Based on recent data, he says, the college was slated to get about $4.5-million more in state funds for the 2020 fiscal year than in the previous year. As of early spring 2019, though, the state budget outlook was still uncertain: An unexpected increase in enrollment at the state's community colleges, along with a shortfall in property-tax revenues, could use up any new dollars.

The president's support of the formula reflects the changing approach to outcomes-based budgeting. In the past, policy makers have focused on using budget incentives to encourage public colleges to

COURTESY OF ALEXA VICTORIANO

After six years of juggling classes, working full time, and helping to support her family, Alexa Victorianio (left) was expecting to earn associate degrees from both Los Angeles Harbor College and East Los Angeles College in 2019. She is pictured with Natalie Hernandez, a friend.

spend tax dollars more efficiently. But some of those formulas have had a negative impact on two-year colleges and others that enroll large numbers of disadvantaged students.

"We wanted to create an equity funding formula that shifted resources to colleges that were serving some of the most difficult communities," says Eloy Ortiz Oakley, chancellor of the California Community Colleges system. The new budget plan provides incentives and rewards to help disadvantaged students earn a degree or certificate as quickly as possible, he says.

Under the state's new formula, 40 percent of higher-education appropriations will be awarded to colleges based on their enrollment of low-income students, including adults, and on some student-success measures, such as completing a certain number of credits or earning an associate degree.

The plan awards more money for low-income students, many of whom are likely to be minority-group members. Income is used as a determining factor because of a 1996 state constitutional amendment, often referred to as Proposition 209, that bars the state from considering race in public education.

"We pushed pretty hard that we should be incentivizing closing the gaps between underrepresented students and their white peers," says Michele Siqueiros, president of the Campaign for College Opportunity, an advocacy group. A metric for first-generation students is also desirable, she says, but the data for that measure aren't yet reliable.

A new funding formula isn't the only measure that the state and East Los Angeles are using to improve student performance. All community colleges in the state are creating "guided pathways" to give students a structured degree program and keep them from getting sidetracked by electives. The colleges are also limiting remedial courses, and instead adopting other models of academic support to make sure students don't get stuck in non-credit-bearing courses.

> **"We wanted to create an equity funding formula that shifted resources to colleges that were serving some of the most difficult communities."**

The state is spending more money to pay college fees for the first two years at all community colleges, regardless of students' income. Low-income students are already eligible for waivers of the $46-per-credit fee, but colleges can also use the state money to help students pay for books, food, or even transportation.

The extra financial aid would have been a big help for students like Alexa Victoriano, 26, who has attended California's community colleges for more than six years. She is the first in her family to attend college, she says, but had to juggle classes with the responsibilities of working full time and helping support her family.

Other hurdles as well have kept Victoriano from completing her degree. In 2016, as she was supposed to graduate with an associate degree from Los Angeles Harbor College, she found that she had taken the wrong math course and wouldn't get the degree after all.

Performance-based funding will help ensure that colleges are doing all they can to support students, she says. She was expecting to earn associate degrees from both Los Angeles Harbor and East Los Angeles in 2019.

Martinez, president of East Los Angeles, says his college's efforts to make sure that more students complete degree programs began several years before the state adopted its new budgeting approach. "Words like 'performance' or 'outcomes' get used," he says, but the formula is really aimed at making sure students complete degrees.

Now, he says, all the state's two-year colleges are engaged in that effort: "The formula has created a sense of urgency for those of us who are leading colleges in the state, and definitely changed the scope of how we do everything."

Dougherty says, hoping to reach wealthier students who would be better prepared for college.

Show Us the Money, Colleges Say

For higher-education leaders, though, the biggest concern about outcomes-based funding is the amount of money at stake and how it is distributed.

"In Louisiana, I have said we are underresourcing the formula, and so you can get better as an institution and get less money," says Kim Hunter Reed, the state's higher-education commissioner. "Because you have to be better than the best institution to get more money."

Colleges that have historically received less money from the state may be at a disadvantage because they can't afford the extra staff or technology needed to improve advising, says Tiffany Jones, of Education Trust.

Another significant limitation of performance funding is that in many states, it does not provide as strong an incentive as lawmakers may have intended. In most states with performance-based funding, the money that rewards student outcomes typically accounts for a relatively small percentage of state higher-education dollars to begin with — less than 25 percent in all but seven states.

In the few states that allocate most of their higher-education support on the basis of student performance, money from enrollment still provides most of revenue for public colleges. In Ohio and Tennessee — two states where all or nearly all state money for higher education is distributed through an outcomes-based formula — tuition and fees still account for nearly 70 percent of the money that pays for academic operations at the four-year colleges, according to an analysis by HCM Strategists.

This situation is magnified in many states where appropriations, on average, failed to keep up with enrollment increases after the recession. So, at many colleges in those states, tuition revenue already accounts for half or more of the revenue that goes toward paying academic costs.

In Colorado, 88 percent of institutional revenue at community colleges comes from enrollment, through tuition and fees and the portion of the state's funding that relies on enrollment. That makes student performance far less relevant than enrollment, says Joe Garcia, head of the state's community-college system. "As states have invested less," he says, "institutions have relied more on tuition, so everything we do continues to be enrollment-driven."

So even if colleges succeed in improving student performance, the reward would be only a small increase in the 12 percent of their revenue that comes from the state, says Garcia.

The solutions for this problem are simple but unlikely: States would have to equalize the amounts they spend on the basis of performance and enrollment, whether by increasing state appropriations for public colleges or by cutting colleges' enrollments.

A Focus on 'Equity Metrics'

Despite the concerns about outcome-based funding, several states are looking at such policies as a way to improve both access and success for historically underserved students.

All but a handful of states with performance-based funding have now incorporated some type of equity metrics — measures to support the success of specific populations, such as minority, low-income, and adult students and military veterans, according to an analysis by HCM Strategists. The most popular equity metric is for low-income students. Ohio uses the most such measures, rewarding colleges that produce performance gains among five categories of students, the report notes.

> **"As states have invested less, institutions have relied more on tuition, so everything we do continues to be enrollment-driven."**

Typically, a state gives a bonus to a college when a student from a selected group reaches a completion milestone.

Such measures are meant to help students like Alexa Victoriano, 26, of Los Angeles, who says she has been in college on and off for some six years. Family responsibilities, full-time jobs, and, temporarily, a very long bus ride to Los Angeles Harbor College, one of the campuses of the Los Angeles Community College District: Those were among the hurdles she has had to clear to earn her degrees, expected in 2019, in communications from Los Angeles Harbor and in political science from East Los Angeles Community College.

Recognizing the Challenges for Community Colleges

California's budget for the 2019 fiscal year was the first full year of performance funding for its 115 community colleges, which collectively enroll more than two million students. The system's chancellor, Eloy Ortiz Oakley, even calls the new funding plan an "equity formula," one of several measures the system has undertaken to improve results for minority and low-income students (see sidebar on Page 28).

"There are a lot of unequal success opportunities for people of color," says Michele Siquieros, president of the Campaign for College Opportunity, founded in 2002 to promote education and economic opportunity for the state's growing population of students who had little access to college. "The promise of a college education is not complete or fully honored if a student can't get through, can't transfer, can't earn a certificate or degree."

California's embrace of this policy represents a significant shift in the rhetoric and purpose of outcomes-based funding: away from an accountability measure and toward one that rewards the success of diverse populations. Notably, the state has put the policy in place for two-year colleges, which typically do not fare well under such a model, because they enroll many part-time, underserved-minority students and low-income students.

> "The promise of a college education is not complete or fully honored if a student can't get through, can't transfer, can't earn a certificate or degree."

The model is intended to align public policy and funding to improve learning for all California students, with an emphasis on equity, Oakley says.

"This is not about efficiency," he says. "We are not trying to create a funding formula that squeezes the pennies and the dollars we give our colleges even more."

A FINAL WORD

Despite its imperfections, performance-based funding appears to be here to stay. The forces of economic demand and political accountability that led to its widespread use will continue to drive higher-education policy. In addition, the public now widely accepts that a college credential is necessary for a good job. At the same time, politicians are unlikely to significantly increase appropriations for higher education. And public colleges must continue to compete for tax dollars with elementary and secondary education and Medicaid, the two biggest portions of state budgets.

The success of performance-based funding, however, is far less certain. The complexity of such plans makes it difficult to determine what elements are effective, irrelevant, or perhaps even detrimental to higher education. More research is essential to help identify best practices. Communication between colleges and stakeholders will help spread ideas and convey the message that institutions are genuinely seeking improvements. And elected officials must be ready to reward those improvements: A shrinking higher-education budget could mean that even colleges that improve student performance will lose money. And the colleges most likely to lose in that scenario typically enroll the students who need the most support to graduate.

The good news is that many of the reforms that colleges are making — with or without the imperative of outcomes-based funding — are meant to improve both student performance and the college experience. The use of financial incentives as a means to increase the educational success of disadvantaged students is also a promising development that can direct resources to the colleges most in need. But policy makers must monitor the consequences of performance-based funding plans and adjust them to make sure that, at the very least, they are doing no harm.

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