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An Overview of State Higher Education Funding Approaches

Lessons and Recommendations

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Introduction

With a pandemic-driven recession and unemployment stratified by postsecondary attainment levels, investments in education, including higher education, are needed now more than ever. Yet, the outlook for state finances is grim, especially if federal investment stalls, and shrinking budgets and financial instability are likely to lead to reductions in state spending.

As we discuss in a companion brief, during times of constrained resources, states' playbooks should include three key elements: ensuring that higher education funding is adequate, ensuring that institutions use funding efficiently, and targeting investment equitably to those students and institutions who need it most. Yet, as the 2008 Great Recession demonstrated, states typically fail to prioritize higher education funding during economic downturns, partly because there are no clear standards at the state or national level for the level of spending deemed "adequate" to ensure agreed-upon outcomes. In addition, recent state efforts to incentivize colleges and universities to raise completion rates, mostly through performance based funding (PBF) policies, have largely fallen flat and in some cases, widened racial and economic gaps in college access. Equity gaps in resources, access, and completion predate both the 2008 Great Recession and the increased use of performance-based funding policies, yet few states have articulated funding strategies to target resources to the students and institutions with the greatest needs. Clearly, a different strategy for state funding of higher education is needed.

In order to inform innovative thinking on state higher education funding, this policy brief explores how public funding in other sectors and jurisdictions supports adequacy, equity, and performance. We draw on relevant approaches in two domestic sectors—preK-12 education and health—and the higher education sectors of three countries—Finland, Australia, and South Africa. To orient the conversation, we first provide a national overview of state higher education revenues and a background understanding on states' current funding approaches.

How Do States Currently Support Public Higher Education?

State funding is not the only source of revenue for most colleges and universities, and the extent to which institutions rely on state funding as a revenue source varies significantly. While public colleges receive roughly 41 percent of total revenue from government sources, this figure is only 12 and two percent for private nonprofit and for-profit institutions, respectively. Notably, public colleges receive one-fifth of their revenue from students' tuition and fees, but private nonprofits and for-profits receive 31 and 94 percent, respectively.

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¹ James Dean Ward, Elizabeth Davidson Pisacreta, Benjamin Weintraut, and Martin Kurzweil, "Reimagining State Higher Education Funding: Recommendations from the Ithaka S+R Convening," *Ithaka S+R*, 10 December 8 2020, https://sr.ithaka.org/publications/reimagining-state-higher-education-funding.

100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% Public 4-Year Private nonprofit Private for-profit Public 2-Year Student tuition and fees (Including Pell grants) Federal appropriations, grants, and contracts State and local appropriations, grants, and contracts Private gifts, grants, and contracts ■ Investment return (gain or loss) Auxiliary enterprises ■ Hospitals ■ Other

Figure 1: Revenue sources by sector

Looking more closely at public colleges, there are significant differences between two- and four-year institutions. Total revenues at four-year public institutions total \$350 billion compared to \$55 billion at community colleges. In the 2017-18 academic year, public four-year colleges received \$48,000 per full-time equivalent (FTE) student in total revenue, compared to \$17,000 per FTE at community colleges.

At four-year institutions, the three largest revenue sources are tuition and fees (20 percent), government appropriations (18 percent), and sales and services from hospitals (15 percent). Community colleges, however, receive nearly half of their revenue from government appropriations, the majority of which come from state governments. Non-operating grants and contracts, which includes revenue from Pell grants, represent 18 percent of total revenues, and tuition and fees comprise an additional 16 percent of revenue.



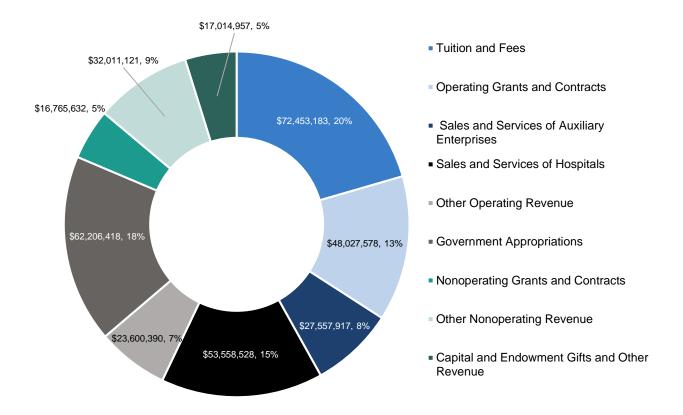
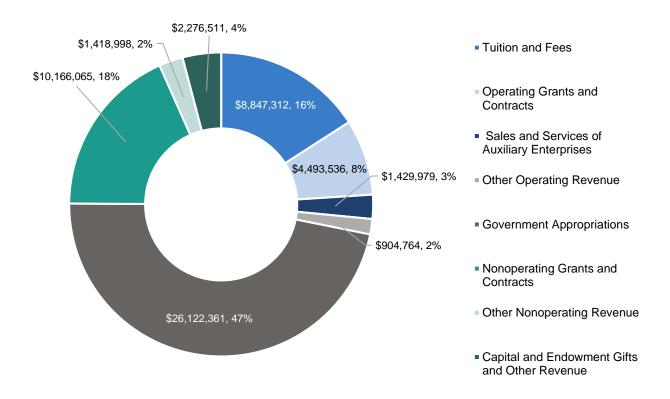
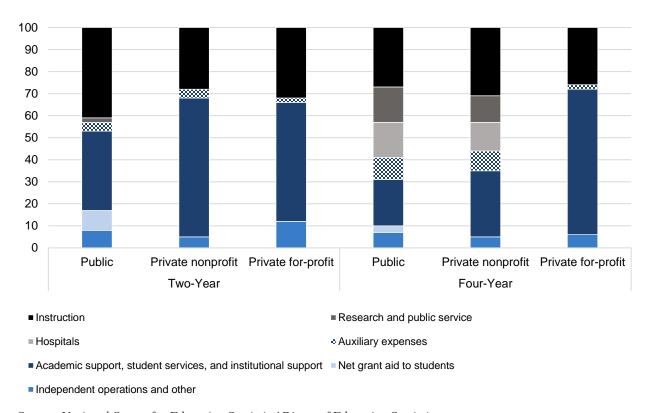


Figure 3: Revenue sources for public two-year colleges



It is also important to consider how colleges spend their money. As seen in Figure 4, public twoyear colleges spend the largest share of their total expenditures on instruction at 41 percent. Not surprisingly, public four-year colleges spend larger shares on research and hospitals, 16 percent of total expenditures each, than community colleges. The variation in expenditures across sectors reflects mission differentiation as well as the funding sources.

Figure 4: Expenditures by sector



Note: Student services includes institutional expenditures on advertising and marketing. For-profit colleges typically spend significantly more on marketing and advertising than their nonprofit counterparts, which is likely to skew the expenditure data for this sector. 2

² John J. Cheslock, "Examining Instructional Spending for Accountability and Consumer Information Purposes," The Century Foundation, 28 February 2019, https://tcf.org/content/report/examining-instructional-spending-accountability-consumer-information-purposes/.

What are States' Current Funding Approaches and How Do They Address Adequacy, Equity, and Performance?

Each state has a unique strategy for allocating resources to higher education, often combining multiple approaches and evolving as political winds change. States' strategies typically include one or more of the following approaches: incremental funding, formula funding, and performance-based funding. In this section, we discuss these three primary approaches and discuss how states' funding strategies do or do not consider issues of adequacy, performance, and equity.³

• Incremental Funding: In this approach, states set the level of appropriations in a given year and then, each year, increase or decrease the amount by a fixed percentage. Often, the annual changes are constant for all institutions in a sector (e.g., community colleges, four-year colleges, etc.), with exceptions for individual campuses in extenuating circumstances or through legislative earmarks. Incremental funding has a low administrative burden, though, in practice, campuses get the same resources despite having different needs. State legislators and governing boards, however, have the ability to tinker with the increments to reallocate appropriations, though these adjustments rarely address cross-campus inequities. Instead, these adjustments typically aligned with political special interests or the creation of a new campus or degree program.

For incremental funding, neither the initial level of appropriations nor the size of the annual percentage change is reliant on designated adequacy thresholds—the level of funding needed to achieve specified outcomes. In fact, since incremental funding formulas do not explicitly account for changes in enrollment or other factors, this approach can result in institutions having fewer resources to spend per student, especially if the annual fixed percentage increase is insufficient. Further, if the initial levels of funding were inadequate or inequitable, then those issues of adequacy and equity can easily perpetuate without intervention. Incremental funding does not incentivize the efficient use of institutional resources or reward specific performance indicators. Many states, therefore, combine an incremental funding approach with performance-based funding, for at least a portion of state funds.

• **Formula Funding:** Unlike incremental funding, formula funding accounts for variation in inputs across campuses and enrollment changes from year-to-year. States that employ this approach calculate appropriations using a formula that accounts for specific inputs, such as the number of students enrolled, the characteristics of the students enrolled, and the level or

³ For a comprehensive overview of funding models please see: James C. Hearn, *Outcomes-Based Funding in Historical and Comparative Context, Lumina Issue Papers*, Indianapolis: Lumina Foundation for Education, 2015, https://www.luminafoundation.org/files/resources/hearn-obf-full.pdf.

field of study. Often, states codify allocation formulas through legislation, so legislators or governing boards have fewer opportunities to intervene.

Much like incremental funding, formula funding does not contemplate the adequacy of the resources provided nor does it account for student or institutional performance. A formula funding approach can consider some aspects of equity by including the characteristics of students enrolled in the formula. However, if the varying needs of different groups of students are not reevaluated over time, formulas can perpetuate inequities in funding.

 Performance-based Funding: A performance-based funding approach allocates state appropriations based on the outcomes of the institution (e.g., the number of degrees conferred). Performance-based funding (PBF), in its current form, is a relatively new approach to allocating state higher education appropriations, an approach based on outcomes rather than inputs. In most states, however, PBF only accounts for a small portion of state appropriations. Only 10 states have a PBF model that accounts for more than 25 percent of state funding in at least one sector as of fiscal year 2019.⁴ As such, states typically pair PBF with either formula or incremental funding, where the formula or incremental approach provides some base level of funding and PBF provides variable funding based on performance.

The spirit of PBF is to incentivize institutions to improve student outcomes—a laudable goal —but there is limited evidence that these incentives lead to the intended outcomes.⁵ There is substantial evidence, however, that PBF restricts access for underrepresented students by inducing institutions to enroll and retain students who they deem most likely to graduate. So from an equity perspective, PBF can potentially worsen equity gaps rather than improve them. The extent to which PBF considers adequacy depends on the way the state employs the policy. For instance, if the state pairs PBF with a formula or incremental approach, then the state has determined that some minimum level of funding is necessary, but has not necessarily defined that amount as adequate. Additionally, some states have included equity premiums to limit unintended consequences and provide institutions with additional resources for serving historically underserved students.

These three approaches are methods for providing state appropriations directly to the state's public institutions, but states also provide significant funding directly to students through state financial aid programs. These programs are often separate line items from appropriations but serve as significant sources of revenue for state institutions and require significant investment of resources from the state. States do not use financial aid programs to provide adequate funding

⁴ Scott Boelscher and Martha Snyder, "Driving Better Outcomes: Fiscal Year 2019 State Status & Typology Update," HCM Strategists, 2019, http://hcmstrategists.com/promising-policy/wp-content/uploads/2019/01/HCM 2019 DBO Final.pdf.

⁵ Elizabeth Bell, Alisa Hicklin Fryar, and Nicholas Hillman, "When Intuition Misfires: A Meta-Analysis of Research on Performance-Based Funding in Higher Education," Research Handbook on Quality, Performance and Accountability in Higher Education (2018): 108-124, https://doi.org/10.4337/9781785369759; Justin Ortagus, Robert Kelchen, Kelly Rossinger, and Nicholas Voorhees, "Performance-Based Funding in American Higher Education: A Systematic Synthesis of the Intended and Unintended Consequences," Educational Evaluation and Policy Analysis (2020), https://doi.org/10.3102%2F0162373720953128.

for institutions or incentivize institutional efficiency. Many states, however, allocate grants to students based on their financial need as a way to address gaps in college access and completion. Yet, the extent to which state financial aid programs allocate funds based on students' need rather than other factors (such as academic performance) varies; furthermore, many states underfund their financial aid programs so that not all qualified students receive a grant.⁶

In addition to these three funding approaches, some states have employed new and innovative funding mechanisms, like promise programs, vouchers, differential funding, and public-private partnerships. These innovations can cut across the more traditional funding approaches or occur outside the funding approaches altogether. Each approach sought to address different issues (e.g., improved efficiency or increased access); however, some have not persisted due to a lack of effectiveness while others are too new to evaluate the effects fully. They suggest, however, that at least some states are open to using alternative funding strategies to meet their objectives, whatever those objectives might be. In the next section, we explore the ways that other sectors—both domestic and international—have addressed issues of adequacy, equity, and performance, and discuss how the US higher education sector should employ these strategies, especially in times of constrained resources.

What Lessons about Adequacy, Equity, and Performance Can States Learn from Domestic and International Sectors?

Overall, few states have higher education funding approaches that allocate funds based on the characteristics of the students enrolled or that account for student needs in determining funding levels, and when they do, these approaches only designate a small portion of funds based on these factors. Few, if any, states set thresholds for the minimum amount of funding needed to achieve specific outcomes. Many more states have adopted policies to incentivize improved performance, but thus far, these policies rarely have the intended effect, and can actually increase equity gaps in student access and success.

The experiences of other education-related sectors—both foreign and domestic—demonstrate that allocating funding in ways that account for the elements of adequacy, equity, and performance (or, accountability) is possible. US PreK-12 education includes all three elements and the healthcare sector reflects elements of accountability. In addition, the higher education sectors in Australia, Finland, and South Africa incorporate equity and performance in their funding models.

These sectors are similar enough to the US higher education sector to make their approaches to and outcomes of funding relatable. Much like higher education, the PreK-12 education and healthcare sectors have a public purpose and often have similar organizational and funding

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⁶ Meredith Kolodner, "Eligible for Financial Aid, Nearly a Million Students Never Get It," *The Hechinger Report*, May 23, 2018, https://hechingerreport.org/eligible-for-financial-aid-almost-one-third-of-students-never-get-it/.

structures to higher education. Like public higher education, most direct government funding for PreK-12 education comes from state and local sources, rather than federal sources. Unlike higher education, however, funding for public PreK-12 comes almost exclusively from public dollars. Healthcare revenues are more diverse than PreK-12 education, but about 45 percent of spending on healthcare is from federal, state, or local governments.8 Similarly, the structures of the higher education sectors in Australia, Finland, and South Africa resemble the US in that there is differentiation between institution types and all have well developed performance-based funding policies.

In each of these related sectors, existing funding approaches have had varying levels of success in fulfilling their purposes. In some cases, such as the healthcare sector, performance-based funding has had minimal effects. In other cases, such as higher education in other jurisdictions, performance-based funding systems are well designed and align policy goals with institutional capacity and missions. In the section below, we discuss the potential lessons to learn from these sectors, with important caveats for policy effectiveness and sectoral differences.

Lessons from the PreK-12 Education Sector

Much like higher education, the sources of revenues in public PreK-12 education vary significantly across states. Unlike higher education, however, PreK-12 schools rely very little on non-public revenue sources (e.g., tuition and fees, auxiliary revenues, and hospital sales). Instead, PreK-12 funding predominantly comes from public sources—public PreK-12 schools receive more than 90 percent of funding from state and local sources. Yet, there is wide variation across states in the share of funds generated at the local versus state level. For instance, in Illinois, local governments contribute about two and a half times as much money to PreK-12 education as the state. In Vermont and Hawaii, however, the state government contributes about nine times as much as local governments.9

Unlike in higher education, many states have set PreK-12 "adequacy goals," which designate specific levels of district-level per-student funding in an effort to provide PreK-12 schools the resources they need to support students. States meet these adequacy goals in one of three ways:10

• Under a foundation grants system, states determine how much revenue a district will be able to raise—based on a reasonable property tax rate—and fill in any remaining gap between this revenue and the district's adequacy goal.

Matthew Chingos and Kristin Blagg, "Making Sense of State School Funding Policy," Urban Institute, 24 December 2018, https://www.urban.org/research/publication/making-sense-state-school-funding-policy.

⁸ Centers for Medicare and Medicaid Services, "NHE Fact Sheer," CMS, 2018, https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NHE-Fact-<u>Sheet#:~:text=Historical%20NHE%2C%202018%3A&text=Medicare%20spending</u>%20grew%206.4%25%20to,34%20percent%20of %20total%20NHE.

⁹ Matthew Chingos and Kristin Blagg, "Making Sense of State School Funding Policy," Urban Institute, 24 December 2018, https://www.urban.org/research/publication/making-sense-state-school-funding-policy.

¹⁰ Urban Institute, "How do funding formulas work?" 29 November 2017, https://apps.urban.org/features/funding-formulas/.

- Under a guaranteed tax base system, states guarantee a set amount of funding per percentage tax levied by the local district. For example, a state might guarantee \$8,000 of per-student funding per one percent tax. If a district's one percent property tax raises just \$5,000 per student, the state would contribute the remaining \$3,000.
- Under a centralized school finance system, the state determines the level of per-student funding, which limits school district discretion.11

These three approaches help states ensure that PreK-12 funding is adequate, but foundation grants and guaranteed tax base models, especially, do not explicitly account for inequities in resources across school districts. These models provide localities with a high degree of power over their ultimate level of funding by allowing districts to set higher tax rates to generate revenues higher than their adequacy goal. This decentralization can perpetuate resource inequities, which may result in students in wealthier districts having more educational opportunities.

The nature of PreK-12 funding means that states often have to correct for resource inequities across school districts by targeting state appropriations to the students who need it most. States with the most progressive and targeted appropriations are often those states with the greatest levels of economic residential segregation and where court orders require them to correct significant disparities in funding across districts.¹² Many states with regressive funding at the local and state level rely on federal funds to boost resources available to disadvantaged students, schools, and districts. Prior to the onset of COVID-19, several states were exploring changes to make their PreK-12 funding formulas more equitable, but state revenue declines may put those plans on hold.¹³

The relationship between PreK-12 funding and school accountability is complex, and while states determine the specific details of their school accountability approaches, the general framework is prescribed by the federal government through the Every Students Succeeds Act (ESSA). This act, passed in 2015, loosened many of the prescriptive accountability elements of its predecessor, the No Child Left Behind (NCLB) Act of 2002, but still requires that states set school performance goals (for both test scores and other student outcomes), designate annual milestones for schools to demonstrate progress towards those goals, and work with districts to design interventions for schools that are underperforming. Rather than withholding funds, however, district interventions must include an assessment of whether district's equitably allocated their resources and must reserve seven percent of federal Title I funds to "turnaround" low-performing schools.

¹¹ Eric J. Brunner and Jon Sonstelie, "California's School Finance Reform: An Experiment in Fiscal Federalism," Working Papers 2006-09, University of Connecticut, Department of Economics, 2016, https://opencommons.uconn.edu/econ_wpapers/200609. Paul Courant and Susanna Loeb, "Centralization of School Finance in Michigan," Journal of Policy Analysis and Management 16 (1997): 114-136, http://dx.doi.org/10.1002/(SICI)1520-6688(199724)16:1<114::AID-PAM6>3.0.CO;2-L

¹² Urban Institute, "School Funding: Do Poor Kids Get Their Fair Share?" May 2017, https://apps.urban.org/features/school-fundingdo-poor-kids-get-fair-share/.

¹³ Daarel Burnette II, "States Gear Up to Overhaul K-12 Funding in 2020," *Education Week*, 3 December 2019, https://www.edweek.org/ew/articles/2019/12/03/states-gear-up-to-overhaul-k-12-funding.html

Higher education can learn from the ways that PreK-12 funding considers issues of adequacy, equity, and performance. First, states should consider defining adequacy thresholds, or the level of educational spending that is necessary for colleges to meet certain outcomes, and then distribute base appropriations accordingly. Adequacy definitions may vary across student demographics and institutional context, and the complexity of college activities (e.g., teaching, research, hospitals, etc.) may require an adequacy threshold that is nuanced and variable. These complexities will require state policymakers to work collaboratively with institutional leaders and higher education researchers to determine these thresholds.

States should strategically marshal local, state, and federal higher education resources to ensure that the students and institutions with the greatest needs receive the most support.

Second, the experience of PreK-12 funding illustrates that defining adequacy thresholds alone does not address inequities across institutions. Recent efforts in some states to redefine PreK-12 funding formulas to account for students' needs are laudable, and even more so in times of scarcity, states should strongly consider these approaches in both the PreK-12 and higher education sectors. States should strategically marshal local, state, and federal higher education resources to ensure that the students and institutions with the greatest needs receive the most support. States can do this by redefining their funding formulas so that state funding corrects institutional inequities and targets resources based on current and changing student demographics. States should also consider reallocating funds from merit- to need-based financial aid programs.

Finally, higher education can learn from PreK-12's approach to the relationship between funding and performance. Much like in PreK-12, states should couple performance metrics that identify underperforming colleges with efforts to understand the challenges these institutions are facing. Rather than penalizing underperforming institutions by decreasing their funding, states should instead target investments and oversight that help build colleges' capacity to serve the students they have. Instead, higher education's performance-based funding policies withdraw money when colleges fail to meet performance standards, risking a vicious cycle that dooms those institutions to longer-term struggles. Unlike PreK-12 approaches to accountability, PBF policies tend to harm institutions with the fewest resources.

Lessons from the Healthcare Sector

Healthcare revenues come from a multitude of sources, but typically, hospitals and doctors receive revenues based on the number of patients they see or services they provide. Because each service is billed at its marginal cost to the provider, these fee-for-service (FFS) models allow providers to offer a wide array of services. The FFS model is similar to higher education's formula funding approach, in which funding is allocated by the number of students enrolled as well as other factors.

Yet, healthcare funding models, much like enrollment-based funding models in higher education, often suffer from the misaligned incentives: they prioritize the quantity of care provided rather than the quality of that care. While both hospitals and colleges have outside forms of quality assurance, including accreditation and licensure, critics of enrollment-based funding and FFS models suggest that, to incentivize improvement, governing bodies should tie quality assurance to funding.

To address these critics and correct misaligned incentives, some hospital systems have introduced pay-for-performance funding schemes, which reward hospitals that perform well on specific quality measures. These measures can include patient satisfaction, frequency of preventative health screenings, and safety measures, among others. However, like performancebased funding in higher education, the available evidence suggests these approaches have failed to improve organizational performance.¹⁴

Much like other sectors, the healthcare sector demonstrates that tying performance to funding may be counterproductive, as these types of performance incentives have yet to improve quality despite repeated efforts to demonstrate they do. The healthcare sector, however, does offer some examples of approaches that may improve performance without tying that performance to funding. The Quality Improvement Organizations (QIOs), used to evaluate Medicare providers, use data-driven metrics to provide feedback on patient care and actionable steps to improve quality, but the government does not withdraw Medicare funding when the provider does not initially meet those metrics. Research suggests that when a provider uses QIOs rigorously, patient care and outcomes can improve.15

Performance metrics are important, but seem most effective when used collaboratively with providers or college leaders to improve internal processes and patient or student outcomes.

These examples provide relevant evidence that higher education leaders should use capacity building rather than performance funding to improve college outcomes. Performance metrics are important, but seem most effective when used collaboratively with providers or college leaders to improve internal processes and patient or student outcomes. Postsecondary funding models should reflect these lessons and use performance and outcomes as opportunities to learn how to improve educational programing and services.

¹⁴ Aaron Mendelson, Karli Kondo, Cheryl Damberg, et al, "The Effects of Pay-for-Performance Programs on Health, Health Care Use, and Processes of Care: A Systematic Review," Annals of Internal Medicine (2017): 341-353.

¹⁵ Maartje De Vos, Wilco Graafmans, Mieneke Kooistra, Bert Meijboom, Peter Van Der Voort, and Gert Westert, "Using Quality Indicators to Improve Hospital Care: A Review of the Literature," International Journal for Quality in Health Care 21, no. 2 (2009): 119-129, https://doi.org/10.1093/intqhc/mzn059.

Lessons from International Higher Education

Like the United States, most industrialized countries have hybrid funding models that rely on market competition (e.g., tuition, research grants, etc.) and public funding (e.g., state appropriations). ¹⁶ In this section, we review the approaches of three countries—Australia, Finland, and South Africa—to the elements of equity and performance. These countries have well-developed performance-based funding systems that seek to accomplish similar goals to states that have increasingly adopted such policies.

A Focus on Equity

Given the importance of addressing equity concerns in the US higher education context, it is worth highlighting how other countries address equity in their own funding models. A 2018 survey of 71 countries showed that 11 percent have fully developed equity strategies and another 11 percent have equity strategies for a specific group. Beyond these specific plans, many countries include generalized goals focused on equity. Of 71 countries, 58 had target goals related to students with disabilities, 57 had goals for low-income students, 43 had goals based on gender, and 40 had goals for minority groups. 17

South Africa has specific equity-based funding built into its formula to help compensate for discrimination under apartheid. In addition to using a performance-funding model, Australia has separate equity funding to improve access for Indigenous, low-income, and disabled students who colleges and universities have historically underserved. 18 These types of equity formulas may be helpful for improving access by incentivizing colleges to enroll historically underserved students and providing the institution with additional funds to help serve these students. These formulas must be tied to control mechanisms that ensure the funds are spent appropriately.

While some US state higher education funding models include equity premiums, this is not a universal practice. Moreover, states should consistently evaluate these premiums to ensure they are adequate to address inequities in postsecondary access. Just as other countries make equity an explicit goal, US funding models should do the same and develop concrete plans to meet these goals.

¹⁶ Harry De Boer, Ben Jongbloed, Paul Benneworth, Leon Cremonini, Renze Kolster, Andrea Kottmann, Katharina Lemmens-Krug, and Hans Vossensteyn, "Performance-Based Funding and Performance Agreements in Fourteen Higher Education Systems," Center for Higher Education Policy Studies (2015),

https://ris.utwente.nl/ws/portal/5139542/jongbloed+ea+performance-based-funding-and-performance-agreements-infourteen-higher-education-systems.pdf.

¹⁷ Jamil Salmi, "All Around the World-Higher Education Equity Policies Across the Globe," Lumina Foundation (2018), https://worldaccesshe.com/wp-content/uploads/2018/11/All-around-the-world-Higher-education-equity-policies-across-the-globe-

¹⁸ Ibid.

A Focus on Performance

Unlike the typical US performance-based funding models, performance-based funding models in Finland and Australia account for a broader range of outcomes. In Finland, funding is based, in part, on performance relative to institution-specific performance agreement. The institution and the Ministry of Education collaborate to determine these multi-year agreements based on national education goals, institutional profiles and missions, and institutional goals. Finland determines funding levels based on an institutions' performance relative to its performance agreement; the government also incorporates a standardized PBF model based on a broad range of metrics that include labor market outcomes, graduate education, research productivity, and spending across disciplines. Institutions may only receive partial funding if they fall short of meeting these goals. Importantly, however, Finnish institutions cannot raise money through tuition and fees, thus making government funding critical for their continued operation and strengthening the imperative to meet performance goals. 19

Australia's performance-based funding is more similar to the early versions in the United States where institutions compete for "bonus" funding. However, the Australian version accounts for employment outcomes and students' perceptions of quality in addition to outcomes and equity. In fact, 40 percent of the calculation is based on student perceptions of their education in an attempt to closely align metrics with the intended goal of the policy—improving quality.²⁰ In both cases, the government has positioned itself to play an active role in accountability rather than predominantly delegating that task to external accrediting bodies as in the United States.

US models of performance-based funding are relatively static. Although the specific percentages for each metric may change over time, few states include an iterative goal setting process with colleges and universities. When institutions and states share a common goal, performance funding becomes a tool to track joint progress towards that goal rather than a top-down punitive approach to accountability. Additionally, the inclusion of a wide set of factors, including student satisfaction and labor market outcomes, may help better align metrics with intended policy goals.

¹⁹ Harry De Boer, Ben Jongbloed, Paul Benneworth, Leon Cremonini, Renze Kolster, Andrea Kottmann, Katharina Lemmens-Krug, and Hans Vossensteyn, "Performance-based funding and performance agreements in fourteen higher education systems." Center for Higher Education Policy Studies (2015), https://ris.utwente.nl/ws/portalfiles/portal/5139542/jongbloed+ea+performance-basedfunding-and-performance-agreements-in-fourteen-higher-education-systems.pdf

²⁰ Paul Wellings, Rufus Black, Greg Craven, Dawn Freshwater and Sandra Harding, "Performance-Based Funding for the Commonwealth Grant Scheme," Australian Ministry of Education, 2019, https://docs.education.gov.au/system/files/doc/other/ed19-0134_-_he-_performance-based_funding_review_acc.pdf

Conclusion

Declines in state funding of higher education will likely worsen due to the economic ramifications of COVID-19. With the costs of providing a college education rising, the reduction in state funding has created financial strains for many public colleges. Despite that their contributions represent a shrinking portion of total revenue, states are expecting colleges to do more to earn that revenue. To this end, many states are including performance-based funding models in their allocation decisions. However, PBF models have not been particularly effective at increasing outcomes measures, and, in some instances, have negatively affected groups of historically underserved students.

We reviewed funding models from other sectors and countries to distill potential improvements on US states' postsecondary funding and have three primary recommendations. First, we suggest that states determine levels of adequacy—the minimum threshold of funding that would provide colleges with the capacity needed to serve their students properly. Second, adequacy thresholds alone may perpetuate inequities if states do not adjust funding formulas to account for differing needs across students and institutions. States should ensure that adequacy levels incorporate the unique needs of subgroups of students, including lower-income students, racial and ethnic minorities, and students with disabilities, to name a few. Finally, performance metrics are one factor that states can consider as they determine the equity and adequacy needs of institutions and work to improve underperforming institutions. We recommend that performance metrics be used to identify areas of need rather than to penalize institutions. By leveraging data to unearth opportunities for additional state investment to increase student success, performance metrics could be a cooperative tool for policymakers and institutional leaders. Moreover, performance metrics should reflect the disparate needs across subgroups of students.

The PreK-12 education, healthcare, and international higher education sectors provide some useful examples of the successes and challenges of implementing these recommendations. As COVID-19 threatens postsecondary budgets, ensuring adequate funding and using data for strategic investments in students will help higher education weather this storm.