Measuring What Matters:
State-level Metrics for Student Success

A State Policy White Paper
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PREFACE

Measuring What Matters: State-level Metrics for Student Success is part of a four-paper series that explores a variety of state policy approaches for dramatically increasing community college completion rates and building a competitive workforce. The series emphasizes the role of state policy in creating the conditions, incentives, and structures needed to forge seamless, affordable pathways to credentials and careers for all students — especially those who are underprepared and underserved. All told, the papers offer policy recommendations for reshaping how states measure student success, fund public 2-year institutions, strengthen alignment across K-12 and postsecondary systems, and support students along their paths.

Said differently, the papers focus on metrics, money, and systems integration. These three pillars reflect the collective vision of JFF’s Policy Leadership Trust for Student Success (the “Trust”) for what ought to be the primary focus of policymakers concerned with college completion. Established by JFF in 2015, the Trust comprises two-dozen community college presidents and state system leaders who together cull their institutional knowledge and the latest evidence to consider how policy can best catalyze change in higher education and improve student success. In 2017, the group released a set of policy design principles and priorities to represent their core tenets.

JFF commissioned this paper series to delve more deeply into the Trust’s priority issues. The goal is to stimulate discussion and consideration among practitioners and policy influencers, alike.

Thank you for reading,

David Altstadt
Associate Director, JFF
INTRODUCTION

News headlines and articles about college education in the United States typically follow one of two contradictory storylines. One centers around the theme that the city/state/nation needs more educated citizens to be nationally/internationally competitive, meet the labor market’s demand for skilled workers, and boost economic performance. The other embraces the idea that people are questioning the value of postsecondary degrees in light of today’s rising tuition costs and mixed reviews from business leaders about the preparedness of people entering the workforce out of college. For policymakers—who typically are not higher education experts but do interact with constituents who are concerned about higher education, including students, parents, and business and community leaders—these types of conversations and concerns, coupled with their own personal experiences, frame their perspective on higher education and, therefore, on the topics that matter.

I asked several policymakers in the Florida State Legislature (in both the house and the senate) the following question: “When you think about community college, what matters to you?” The most common responses were relatively simple and had very little to do with the process of higher education (aspects such as fall to fall retention rates or student-faculty ratios) but instead focused on outcomes along the following three themes:

1. How do the credentials support the economic and postsecondary attainment goals of the state?
2. What happens to students after they graduate?
3. How much does a degree or a credential cost?

This is by no means an exhaustive list of policymakers’ concerns. For example, some expressed concern about student debt, the status of specific student populations, or campus safety. But many of those issues can be linked to the above questions. It is important to note that in each of those three questions, the unit of success is either the state or the student, not the institutions themselves. Institutions are perceived as a means to an end, and their “success” depends on their contributions to their students and their states—or, in the case of community colleges, their service areas. This perspective directly impacts the metrics that policymakers use to evaluate the success of institutions.

Policymakers may draw on an assortment of metrics to guide their policy interventions and funding decisions for the postsecondary sector, and to attempt to influence the behaviors of students and their families—all in the name of catalyzing change and improving outcomes. Naturally, postsecondary practitioners and other stakeholders take a great interest in how policymakers define, track, and use metrics to make change. The “wrong” metrics could reward
the “wrong” actions by colleges and students and undercut aims to bolster equity and implement evidenced-based student success reforms.

With all of that in mind, this paper is intended to spur discussion among policymakers and education practitioners on the most meaningful metrics for states to collect and act upon. It offers a set of metrics that correspond to (and, ideally, address) the three key questions of policymakers. The proposed metrics would also be sensible and meaningful to postsecondary stakeholders seeking to drive the “right” system changes. The paper considers ways in which policymakers are applying metrics (e.g. through outcomes-based funding and public information tools) to inform and influence behaviors and to inform policy solutions. The paper concludes by offering a set of state policy recommendations for sound use of state-level metrics, especially with an eye toward setting the conditions for institutions to implement comprehensive, scalable reforms, such as guided pathways, and for improving the success of underrepresented, underprepared populations.

It is important to clarify at the outset that this paper is not focusing on metrics utilized by institutions, state systems, research organizations, and philanthropic organizations to measure student persistence through college. While community college reformers are embracing a set of key performance indicators to track student progression through guided pathways, their metrics are not necessarily appropriate or relevant for use by policymakers in state-level performance and accountability systems.
METRICS THAT MATTER

For the purposes of this paper, the three questions that policymakers ask are converted below into 10 high-level metrics. If policymakers are able to access rich data for each of these metrics, they will have a comprehensive picture of how individual state community colleges and/or community college systems are performing in the three areas above that matter to them. Furthermore, these sorts of metrics are most likely to stimulate appropriate actions by institutions and education sectors to improve student success while also helping to inform the education decisions made by students and families.

**Figure 1. Ten Metrics That Matter**

Note: The calculations to arrive at these metrics can be relatively complex, requiring multiple data points in and of themselves and also within each of these metrics. There are also specific factors that need to be addressed, with equity being perhaps the most important. To help ensure equitable results for students, and to identify gaps, the data for each metric must be disaggregated by student populations and categories, including age, gender, race and ethnicity, and income. The 10 metrics in Figure 1 are clear delineations of policymaker interests. In the following sections, this paper will delve deeper into each of the metrics and provide examples.
How do the credentials support the economic/attainment goals of the state?

While the metrics are not ranked in order of importance, the above question is foundational to understanding the role that community colleges play in a state. After defining the state’s economic and/or attainment goals, policymakers can analyze benchmark data around the metrics below to identify successful outcomes to meet goals for degree production and workforce alignment. To answer the question of whether the credentials produced are meeting the workforce needs of the state or region requires an analysis and understanding of supply and demand. Although by and large states have seen an upward trend in attainment rates, the production still lags behind demand—which leads to unfilled jobs and/or unemployed workers. To begin to assess this question, one should examine the state’s attainment rate workforce demand and its annual degree production.

**Metric #1: State (Postsecondary) Attainment Rate.** A state’s postsecondary attainment rate, considered a common measure, reflects the percentage of residents aged 25–64 (traditional working age population) with college credentials. This metric can be disaggregated by a number of variables, including race and ethnicity, socioeconomic status, and whether people live in urban or rural areas. The attainment rate compared against current and future workforce demand provides an estimate of how close a state is to meeting its future workforce needs. According to HCM Strategists, the firm that tracks state attainment goals for the Lumina Foundation, leaders in more than 40 states have established postsecondary attainment goals.

Postsecondary attainment goals are appealing to policymakers because they provide a shared vision for the future of the state, address talent gaps and the need for improvement within the workforce, identify and align with high-demand occupations, and address inequities among the state’s residents. These goals are intended to drive policy and budget decisions that will narrow the gap between supply and demand.

Community colleges play a crucial role in increasing postsecondary attainment rates because no state will meet its individual attainment goal without significantly increasing attainment rates of traditionally underserved students. These colleges provide a critical access point to postsecondary education for all students, and especially for students of need. The capacities, proximities, and open-access missions of community colleges make them a primary access point to higher education and college credentials for many individuals, including low-income people, members of minority groups, adult learners, and other underrepresented groups.

Disaggregating attainment rates, and setting attainment goals, are levers to address equitable outcomes and gaps between specific populations. For example, Arizona has set a goal of achieving a 60 percent attainment rate by 2030 and has acknowledged that meeting that goal will require a deliberate strategy of supporting Latinos pursuing postsecondary credentials. And Texas, which has also adopted a 60 percent goal, has set targets for reducing racial and ethnic
achievement gaps and is beginning to see a narrowing of those gaps. Data about state attainment rates, which includes rates disaggregated by race, ethnicity, and age, are available via the U.S. Census Bureau’s American Community Survey.

**Metric #2: Workforce Demand.** The term “workforce demand” refers to the number of unfilled jobs in a state or region of a state by type of occupation. Occupations are defined according to the 2018 U.S. federal government’s Standard Occupational Classification (SOC) system. The workforce demand metric is important to policymakers because employers often say they cannot expand their businesses without additional skilled workers, especially highly skilled workers in high-wage occupations. All states have state workforce agencies structured under the U.S. Department of Labor that provide annual occupational outlooks. In some circumstances, there may be a disconnect between the definition of a particular occupation and the actual jobs that exist within a particular state.

Community colleges have a long history of responding to local workforce demand. The daily efforts of college leaders to meet current workforce demand, anticipate future needs, and document job placements are a critical function of college administrators that are not often recognized. Program reviews, participation in local workforce boards, and analysis of workforce data are a few ways colleges strive to meet local workforce needs. Yet, workforce data is not well documented and is often overlooked. Innovative statewide partnerships to facilitate such efforts would go a long way toward facilitating the development of strong and effective state policy recommendations. In Florida, for example, the Florida College System partnered with the Florida Department of Economic Opportunity to create the State College Projections Portal as a way to help colleges understand the state’s workforce needs and measure their alignment with those needs. This web-based portal provides all 28 colleges with access to occupational projections for their service areas, and that information includes the data they need to make an economic case to policymakers about their ability to respond to workforce demand.

**Metric #3: Annual Credential Production.** The degrees, certificates, and other credentials that colleges award help meet workforce demand and contribute to states’ efforts to achieve their attainment goals. Information about credentials awarded is of value to policymakers because it is an indication of the number of their constituents who are being prepared for work. In addition to being interested in the number of credentials awarded, policymakers also want to know the fields of study that students are majoring in to ensure that the state doesn’t have too many graduates with credentials in what are perceived as less useful disciplines, such as general studies. Colleges provide information about credentials to the Integrated Postsecondary Education Data System (IPEDS) every year. Most states have annual reports on the number and type of credentials awarded by institutions. For example, since 1966 the Illinois Community College Board has published a “Data and Characteristics” report that includes information about all colleges in the system. Section 3 of that report includes the number of associate degree, transfer, general education, career and technical education, adult basic education, vocational, and adult secondary education degrees,
and those figures are broken down by the demographic characteristics of the students who earned the credentials. This allows for an understanding of the system’s contributions to achieving attainment goals and meeting workforce demand in general. Practitioners could use those state metrics to demonstrate the scope and impact of their pathway reforms to policymakers.

What are the opportunities for community colleges?

While each metric can stand on its own, the challenge is understanding the interrelationships between the three metrics. Community colleges can, and should, do a better job of discussing and sharing the significant contributions that their credential production makes in achieving their states’ attainment goals. Because attainment only measures the first degree or credential earned, the colleges play a significant role in boosting statewide attainment. For example, once a student earns an associate degree, he or she is captured in the attainment rate—so each successive credential by that person does not further increase the attainment rate. Also, there are approaches taken in some states to create new credentials, leading policymakers to believe that completion/production rates are being improved, while in reality the gains are negligible. This scenario is ripe for policy interventions.

Success in meeting workforce demand and annual credential production are intended to serve as quality control indicators—for policymakers the ultimate measure of the quality of a credential is whether or not the graduate gets a job. If students are not studying subjects that give them skills for which there is workforce demand, then colleges are perceived to be failing. Therefore, colleges must take a targeted approach to the programs they start and maintain. Job placement, discussed later, also serves as a quality control indicator. In theory, efforts to achieve state attainment goals and efforts to fulfill workforce demand both lead to job placement—a more educated populace will have a higher rate of job placement because people will have the skills to meet workforce demand. As is the case with the other metrics to be discussed later, these three metrics are important to policymakers, and therefore practitioners need to be able to articulate what they entail and convey a clear understanding of them to policymakers.

What happens to the student after they graduate?

Community colleges are often praised for their partnerships with local businesses and industry leaders because those partnerships help ensure that students are exposed to the types of curriculum, skills, and credentials that prepare them for work after they graduate. When policymakers ask, “What happens to students after they graduate from community college?” they are primarily interested in whether graduates end up working in fields related to their programs of study or whether students have successfully transferred to four-year institutions and are working toward bachelor’s degrees. They are also interested in learning whether the incomes of those who are working have risen. In short, policymakers want data on whether students are better off after community college than they were before they started.
**Metric #4: Job Placement.** Job placement rates measure the percentage of graduates who get jobs within certain time intervals after they finish school. Because job placement rates measure the number of graduates who are employed, they answer the question, “Are students getting jobs, preferably in their fields of study?” Despite keen interest in employment outcomes, the ability of community colleges and community college systems to track postgraduate outcomes is limited for a host of reasons. For one thing, some programs of study do not match easily to occupational classifications, making it more difficult to determine whether students are working in their fields of study. Moreover, tracking employment outcomes often depends on aligning employment and educational data systems, and doing that requires negotiating data-sharing agreements and getting approval from state legal authorities. And finally, it is difficult to determine which institutions deserve credit for student employment outcomes, because many students attend multiple institutions.

When they are able to access the necessary data, community colleges regularly show job placement rates on the order of 90 percent. In Virginia, the State Council of Higher Education has a scorecard that provides program-level outcomes for students.¹⁰ Such efforts should be normal practice.

**Metric #5: Transfer Success.** Transfer success metrics measure the total number of students who transfer from a community college to four-year programs, the number of students who complete a credential prior to transfer, and the number of students, grouped by entry cohorts, who ultimately graduate with the four-year degrees. Policymakers are interested in the transfer metric for a number of reasons. For one thing, it highlights the fact that the various institutions of higher education in a state do, in fact, comprise a unified “system” – whether or not they are tightly bound by common governance structures. Second, it shows that higher education systems are able to offer students an understandable path to college completion that isn’t too expensive or time-consuming. And third, the transfer process enables students from across a state to readily access bachelor’s degree programs. Most colleges, through participation in data-sharing agreements and a national initiative known as the National Student Clearinghouse, are able to showcase how many students transfer to four-year institutions, although it isn’t possible to track individual students through this effort.

Because 84 percent of community college students work, it is not surprising that they continue to work after graduation. If they transfer to four-year institutions, their need to work doesn’t necessarily end. Therefore, the transfer metric and the job placement metric overlap, because many students who go on to four-year schools are also employed. However, more often than not, those two metrics are reported independently. In rare cases, they are reported separately, typically on bar graphs that show the percentages of community college graduates in these three groups: “working only,” “transferred only” and “transferred and working.” That approach provides the most comprehensive portrait of student outcomes.

Although transferring from a community college to a four-year program is common goal, many two-year students do not transfer. Even when students do transfer, many do not earn bachelor’s
degrees. Therefore, it is incumbent on policymakers to keep close watch on transfer and completion rates. States should consider setting statewide transfer goals.

**Metric #6: Earnings.** This metric is a record of students’ incomes one year after they graduate. Policymakers track earnings because it represents an immediate indication of return on investment. The Virginia Community College System, for example, uses the state’s longitudinal data system to calculate a range of earnings outcomes. That data provides policymakers with valuable information, and it can be used in program review processes.

**Metric #7: Economic Mobility.** Whereas earnings is a measure of students’ incomes one year after graduation, economic mobility is a record of how much money they’re making five to 10 years post-graduation. Policymakers like to track economic mobility because it helps them understand if graduates are better off economically than they were when they started school.

Many states that have access to earnings data are beginning to calculate longer-term earnings for graduates of community college programs. However, given the role of community colleges in the higher education ecosystem as providers of nonterminal credentials, the longer-term outcomes may not be fully attributable to just the community college but also to subsequent education and workplace training. According to Davis Jenkins of the Community College Research Center (CCRC), there is a broader argument being made, and rightly so, about the need to share these metrics and the need for all parties involved in a state’s postsecondary education system—including community colleges, community college systems and four-year universities—to be accountable for earnings outcomes. This is not just an issue for the community college community but for all colleges and universities.

**What are the opportunities for community colleges?**

These four metrics are rife with complications related to the way they are calculated, the way they intersect with one another, and the way the various sectors of the education system intersect. Therefore, they invariably cause confusion among policymakers—or at least they are critiqued to such an extent that the issues confuse policymakers. For example, the ability of states to answer whether graduates are getting jobs in their fields of study is limited and the challenges are technical in nature.

One of the biggest technical challenges stems from the difficulty of directly aligning college majors with specific jobs. For some majors—like petroleum engineering—aligning the field of study with an occupation is a fairly straightforward matter. However, graduates with degrees in majors like business administration can end up with a range of different jobs, and in many cases their career choices will overlap with those of people who studied other subjects, like economics or marketing. A substantial effort has gone into utilizing existing data to clarify the connections between majors and occupations, but the results are far from perfect. And the matter is further complicated when it comes to calculating earnings and dealing with people who studied at more than one institution. Should the earnings metric only be for people who went to work full time?
after finishing community college, or should it be for all community college graduates—even those who transferred to other schools instead of getting full-time jobs? How do you remove the influence of further education for 10-year earnings outcomes? Who gets the credit? The blame?

**How much does a degree or credential cost students and the state?**

College affordability continues to be a concern among prospective and current students, parents, and policymakers. As the cost of college continues to rise, outpacing household income, individuals are forced to make real decisions about whether it’s worthwhile to invest in a college degree or credential. Policymakers, facing tight state budgets, competing budget priorities, and the real concerns about the rising cost of college, look to data to determine the cost of credentials and use that information to make spending decisions. They also try to provide their constituents with information about which pathways provide the best returns on their investments.

To answer the question “How much does it cost to earn a college degree or credential?” policymakers look at data on costs to the state (including direct appropriations and student financial assistance) and costs to the students (which includes tuition and fees). Increasingly, policymakers are looking at the indirect costs associated with attending college, such as the costs of housing and transportation, as well as the length of time it takes students to earn degrees—because the longer it takes to earn a credential, the more that credential costs a student. While institutions bear the cost of instruction, the costs of attendance outside of direct cost of instruction are very complex and harder to delineate. Again, seen from the perspective of policymakers, the unit of measurement is often the student and/or the state, while the institutions are seen as vehicles or service providers.

**Metric #8: Cost to Students.** The cost to students can be viewed from both the student’s perspective and that of the institutions. The cost of attendance is an estimate of the entire cost of going to college, including not only tuition and fees, but also the costs of housing, transportation, books and supplies, food, and other expenses. This amount is used to calculate the amount of financial aid a student is eligible to receive. To colleges, the cost to students only includes tuition and fees, because they are the only expenses the institutions have control over—though colleges may try to influence the other expenses, such as the cost of books. While policymakers generally understand the difference between a student’s and college’s perspectives, they sometimes get confused.

For both, sources of information are available, primarily through the Integrated Postsecondary Education Data System. However, there are some limitations to the IPEDS data set for measuring progress of all students, including the fact that institutions self-report their information to IPEDS, so the possibility of error exists, particularly in regard to the reported programs of study. Moreover, there is a lag of about one year between when IPEDS collects its data and when that data is released, and the information in IPEDS is not comprehensive because the system does not include information from all education and training programs.13
Some states and related institutions are looking more closely at student costs and are devising possible approaches to decreasing those costs. Such efforts are underway in Maine and Minnesota. In **Maine**, a foundation has offered to pay the college debt of students who commit to working for Maine companies for a certain number of years. **Minnesota** is finalizing a plan to make student fees optional. Other efforts aim to reduce overall cost of education by reducing the amount of time it takes to earn a degree.

**Metric #9: Cost to the State.** Estimates of a state’s investment in college education generally involve calculations of the revenue institutions receive from state sources—almost solely in the form of appropriations. Policymakers are interested in this metric because it helps them understand the scope of state legislative efforts. This type of data—most accurately the total state appropriation and state financial assistance to students at every institution—is available for all states. However, it is challenging to pull this data together on a nationwide level because there is no single survey that collects data about state education costs. IPEDS has information about appropriations but not about the amount of state student aid—that data is collected in the annual National Association of State Student Grant and Aid Programs (NASSGAP) survey.

**Metric #10: Time to Degree.** According to the Urban Institute, time to degree is the average time it takes to earn a degree. It is a metric that depends upon a number of factors, including some choices students make that can affect the price of college. For example, students who decide not to take a full course load may have more time to work, and thereby earn more money to pay for college, but they will also take longer to graduate, and spending more time in school increases the net price of a degree. Taking fewer classes can also increase forgone earnings, reduce financial aid, and increase the amount of debt students accumulate. Policymakers are focused not only on how many credentials are produced but also on how long it takes to earn a degree or complete a program. They are also increasingly interested in on-time completion: They want to know not just how much time it takes to graduate, but also what percentage of graduates are finishing within 100 percent and 150 percent of the standard amount of time allotted. (Data about those who finish within 150 percent of the standard time is captured in IPEDS, however data about those who finish within the standard amount of time is not readily available for community colleges.) This metric has as much to do with cost as it does with efficiency. It provides a mechanism for comparing how quickly various colleges are getting graduates into the workforce and are thereby helping to improve state attainment rates and close talent gaps.
USING METRICS TO DRIVE POLICY

Policymakers use metrics to inform decision-making and drive change in the context of the three guiding principles and considerations of what matters: expanding the pool of talent available to meet workforce needs, making sure students who invest in college receive reasonable returns on their investments, and driving down costs. Policymakers have an opportunity to use data to foster favorable educational outcomes by influencing both student behavior and the behavior of institutions and systems through policy, funding decisions, and public information strategies. There is a difficult balance to ensuring that the metrics are simple and transparent but also complete enough to help policymakers understand the interrelationships between certain pieces of data that can potentially have unintended consequences.

A longstanding tool for policymakers is the annual accountability report. This public display of institutional outcomes in and of itself serves as a motivator for institutions. But it is not the only tool.

While policymakers implement a number of policy changes to mandate behaviors that are best practices for institutions, one policy lever that has been very successful in changing institutional culture to focus on student outcomes at scale is outcomes-based funding. When implemented correctly, outcomes-based funding directly aligns a certain amount of institutional funding with state goals.

Increasingly, policymakers are also developing, or requiring institutions to publish, public information tools to help students and parents make informed decisions about college options. The purpose of those efforts is to guide students into the colleges, programs, and majors that are most likely to yield the outcomes that students desire.

Accountability Reports

The above examples of metrics associated with key policy questions are complex, and that information is currently kept in a hodgepodge of different locations. Many of the metrics and data mentioned above are public but are not necessarily located in the same place. Most of the data can be accessed from IPEDS, the Census Bureau’s American Community Surveys, longitudinal state data systems, and educational institutions themselves, but sometimes the data needs to be unpacked, spliced and packaged into a format that laypeople can understand. For people who are not higher education professionals, the number of metrics, data definitions, and sources can be confusing—a veritable metrics soup. Because policymakers value accountability, they need a place where they can easily access the metrics that matter to them and their constituents.

The California community college system is working to create a simplified set of system-level metrics that will be used to measure performance of state initiatives. California acknowledges the need to align the metrics with the requirements of the colleges while reporting data.
recent years, the California community college system has had an impressive record of working
to create systemwide metrics to support accountability, inform improvement efforts, and
communicate outcomes. The state attempts to take into account the range of students’
educational journeys when determining which metrics work best to evaluate and document
educational success. In particular, it has considered the implications of students attending
college part time or dropping in and out multiple times.

Upon implementing large-scale reforms, policymakers often request an annual report or
accountability report to help them understand whether the changes are having a measurable
impact. These reports, including annual accountability reports and factbooks, can be powerful
tools for making policymakers aware of progress in student success—if the authors (i.e.
professionals working in higher education agencies) present the information in a simplified
manner and align findings with key state priorities. Too often, however, these types of reports
get overcomplicated, include too many metrics, and lose focus and fail to show alignment with
the intended purpose. When done well, the reports draw connections between findings and
strategic goals (such as state educational attainment goals), or they present information in a
simplified, outcomes-based framework and then drill down from there (i.e. disaggregate
particular student groups or capture leading indicators that inform the direction of the ultimate
outcome).

If organized properly, accountability reports can be a powerful way to bridge the gap between
policymaker and practitioner—a way to educate and build context for policymakers who want to
drive positive change but may not have a good understanding of the factors that influence a
particular outcome. For example, the number of students who complete their courses of study
(for a state as a whole or for a specific institution) may be headed in a positive direction, but
when the data is disaggregated, the results may reveal discrepancies in gains between groups of
students by income level, gender, or racial or ethnic background. Such gaps would indicate a
need to further analyze policies to see if there are current policies that inhibit progress, or
potential policies that could be implemented to encourage progress.

**Outcomes-based funding (OBF)**

State operational funds are a primary funding stream for colleges, and policymakers are
increasingly looking to ensure that those funds are allocated in ways that create incentives to
achieve state goals and objectives. For more than 30 states across the country, performance- or
outcomes-based funding models help show the alignment of funding with state priorities for
community colleges. According to a report by HCM Strategists, the objectives of outcomes-based
funding include the following: to align state funding with the state’s attainment goals and
priorities for community college student success, to align institutional and state priorities with
the goal of supporting the implementation of proven best practices at scale, and to hold
institutions accountable for their roles in reaching state attainment goals. The metrics
commonly used to measure the effects of outcomes-based funding include student-centric
factors, such as progression and completion, job placement and earnings, and efficiency metrics, such as cost and price.

Outcomes-based models vary greatly from state to state. Strong OBF models are built around clear state goals for attainment and priorities, and they are designed to give institutions incentives to produce specific credentials or foster higher completion rates among certain student populations. For example, some state models include metrics for STEM-H (science, technology, engineering, and math, plus health care) or other programs focused on fields in which demand for talent is strong. Moreover, OBF models can be used to create incentives to bring about equitable outcomes for traditionally underserved populations, such as low-income or minority students, adult learners, and academically underprepared students, by providing weights to the progression and completion rates for students in groups such as those. When states pair their funding models with population-related metrics, there is great potential for closing achievement gaps and boosting economic mobility.

Outcomes-based funding—especially some of the earliest models that states adopted—has elicited concerns over the disconnect between state-level funding metrics and institutional priorities. Practitioners contend that some of the metrics in OBF are outside the control of the institution. For example, job placement or salaries largely depend on the economy of the region. Graduation rates are a result of many factors, including academic preparedness and enrollment intensity, which open-access institutions cannot directly control.

Nonetheless, some colleges have harnessed the pressures of outcomes-based funding to redesign their institutional practices in ways that make a positive impact on student success. For example, institutions have found that they can influence or encourage these outcomes by implementing guided pathways best practices, such as bolstering student services, revising curriculum and gateway courses, and providing incentives for students to increase enrollment intensity. To track intermediate-level success and productivity, institutions have used progress indicator metrics, such as academic preparedness, credit accumulation, and efficiency in progressing to degree completion. Other student factors, such as cost, also help institutional leaders determine program schedules and teaching loads and then make policy adjustments to better serve students.

A six-state analysis of outcomes-based funding systems offers guidance to policymakers on the timeliness and availability of data used to populate OBF metrics. Most of the data discussed in the paper can be accessed relatively easily through state longitudinal data systems and federal databases, but in some cases individual institutions hold the data. For OBF to be effective, the metrics used should be transparent, reliable and limited in number. Certain metrics (such as wage data) are available in real time, while others may only be tabulated annually or on an even longer-term basis, as is the case for graduation rate cohorts, for example. For institutions to be able to use OBF metrics to course-correct in a timely fashion, it is important to see the effects of policy changes as quickly as possible. Research encourages the use of numbers over rates for that specific reason—because there is a lag between when policies are implemented and the
outcomes shown by metrics based on rates. For example, completion rates for any given year will be the result of policies implemented three or four years earlier.

State policies based on outcomes-based funding are growing more common, and the metrics used in these models are increasingly what policymakers would describe as “metrics that matter” for state community college and higher education outcomes. Given the stakes, it is essential that practitioners at the institutional and state system levels participate in policy design conversations around the specific metrics, definitions, funding levels, and data sources used to measure community college performance. The best metrics are those that allow institutions and state systems to have some flexibility in the decisions they make about the best practices to adopt in order to meet the state’s desired outcomes.

**Consumer Information Tools**

Policymakers employ a number of strategies in hopes of influencing students to choose higher-education paths that provide the greatest return on investment for them, their communities, and state taxpayers. Although policymakers cannot directly control student behaviors (i.e. which institutions or majors they select), they can exert some level of leverage by, for example, granting free tuition to students who meet certain criteria or reducing tuition rates for certain programs of study to increase the workforce supply in targeted career fields.

In addition, policymakers have increasingly turned to public information tools in an effort to guide student decisions. Tools such as the College Scorecard provide data such as graduation rates and average levels of student debt in hopes of encouraging prospective students in certain locations to consider specific majors.

In many cases, the metrics and information presented in public information tools are closely aligned with policymakers’ priorities, especially postgraduate outcomes, cost, and student debt. Still, because these tools present a limited number of metrics, policymakers should be cautious about relying on information they provide as the basis for policy decisions. For example, the College Scorecard, a tool from the U.S. Department of Education, provides information on college costs, graduation rates, and post college outcomes at public and private colleges across the country. This tool is simple, interactive, and allows users to compare multiple institutions. However, it does not provide outcome information by race, ethnicity, income, or age. In addition to the tools listed above, other tools available include the College Navigator from the National Center for Education Statistics and the Financial Aid Shopping Sheet from the U.S. Department of Education. Both are easy to access, offer clear explanations, and provide prospective college students and their families with valuable supplementary information.
RECOMMENDATIONS

It is critical for practitioners to be at the table to guide the use of metrics in policy decisions. Practitioners have a key role to play in telling policymakers about the best available data, connecting institutional success with state goals, and ensuring that metrics encourage ongoing improvement. That said, it is also incumbent on practitioners to translate the efforts and successes of their institutions and state systems to the units of analysis that are most meaningful to policymakers—the state economy and the students, not the institutions. Practitioners should seek to understand what matters to policymakers and frame the data and metrics around those concerns. In doing so, they will open up opportunities to provide policymakers with context on the factors that contribute to educational success and potential policy barriers that could limit success.

Here are some policy recommendations that practitioners may want to consider raising with policymakers to ensure that metrics drive the right—not wrong—behaviors in their states.

1. **Set an attainment goal for high-quality, affordable credentials of value that support the economic needs of the state and are equitably distributed.**

   Recognizing that postsecondary education is key to fostering economic mobility and building healthy communities and strong state economies, leaders in 40 states have developed postsecondary attainment goals to increase the percentage of residents with education and training beyond high school.\(^{24}\) Attainment goals are ambitious, quantifiable targets for improvement based on comparisons of baseline data of population demographics and postsecondary education attainment levels against projections of the attainment levels necessary to fulfill state needs. A postsecondary attainment goal sets a framework for policy reform that is intentionally focused on equitable outcomes and meeting workforce need. Under the umbrella of postsecondary attainment, a state is able to shape its policy and budget decisions to close gaps and meet its goal.

   To meet their attainment goals, most states will require significant increases in outcomes for students from traditionally underserved populations. Therefore, it should be possible to disaggregate attainment metrics by race, income, age, and gender to ensure that state and regional goals and priorities are being met.

2. **Create a public-friendly mechanism for providing regular updates on metrics to policymakers.** Practitioners are required to collect and report a number of different metrics to many stakeholders. In carrying out those reporting requirements, they should look for ways to create public-friendly tools, such as accountability reports, that align with state attainment goals and other policy priorities. Practitioners and educational systems should also work with policymakers to link education and workforce
data in order to better track the educational attainment and employment outcomes of students. Disaggregating data can provide a powerful tool to determine gaps in equity and highlight the extent to which education is increasing economic mobility among citizens. Metrics that matter to policymakers should be compiled in annual reports to ensure that the metrics are easy to access, consistently reported and regularly updated.

3. **Advocate for outcomes-based funding metrics that are aligned to state attainment and economic development goals.** Thirty states have adopted policies calling for some form of outcomes-based funding with fiscal implications at the institutional level. These models should be transparent and clearly aligned to state goals and priorities, and they should include a limited number of measurement metrics, with agreed-upon data, statistics, and sources.

Because the stakes are so high, implementing an OBF model must be a politically negotiated process. Early OBF efforts suffered from a number of design flaws, including top-down implementation and a “one size fits all” approach that did not take regional differences into account. Gathering input from practitioners, researchers, and business and industry leaders about the data elements, metrics, and sources can help to ensure broad support and technical accuracy in building OBF models. Policymakers should limit the number of metrics included as a way to keep the focus on outcomes and avoid diluting state priorities. In order to gain buy-in, it is important for policymakers to provide transparency about the amount of funding that is at stake and how the metrics will be used to allocate that funding.

4. **Ensure that state data systems capture and report key metrics consistently.** When making policy, it is essential that policymakers have a clear and complete picture of the education and employment experiences of different types of students. Community college professionals should work with their partners in K-12 systems, universities, and the workforce to align data systems (and push for policy changes when needed) in order to track students in a consistent, reliable, and timely manner through the education pipeline and into employment. Doing so should increase the likelihood that policymakers will make policy decisions based on sound information.

The Washington State Student Achievement Council has released a 10-year road map report titled “Educational Attainment for All: Diversity and Equity in Washington State Higher Education.” Among other things, the report calls for increased disaggregation of data for diverse populations, more consistent data definitions across the state’s entire K-20 educational system, and improvements in the ability of Washington’s educational systems to view their own data and track individual students as they proceed through transitions from high school to college and among postsecondary institutions.
5. **Negotiate an ultimate metric linked to the role of colleges.** Metrics should be built on clearly articulated goals relating to the role and purpose of colleges. Policymakers and practitioners should discuss the role of community colleges in helping states meet their economic and educational priorities. It is essential that this conversation take place before the parties delve into specific metrics and forms of measurement. For instance, if economic mobility is identified as the ultimate goal, everyone at the table should figure out how institutional efforts can be translated into metrics. It is important to note that limitations in available data may make it too challenging to quantify big goals, and that it may be necessary to make adjustments to reflect regional characteristics. The next step is to figure out what data improvements are needed to capture the desired measurements in the most accurate and transparent manner.
CONCLUSION

An interesting dynamic exists between definitions and perceptions of state success and institutional success. There are currently a number of state-level metrics that align with policymakers’ concerns and viewpoints about community college success. Within those metrics, there are a number of limitations and complexities regarding the interrelatedness of the measurements and various cohorts. It is important to remember that policymakers generally have a limited understanding of the processes within community colleges, and that this limited understanding affects their views about what really matters—supporting the state’s economic and educational attainment goals, postgraduate outcomes, and the cost of credentials). With that in mind, it may be prudent for state-level policymakers to focus on a limited number of high-level metrics that are focused on outcomes. Otherwise, if process-level metrics are implemented at the state level without context, the potential exists for those metrics to end up in accountability reports, funding models, or public information tools, and that could have negative implications for future policy and institutional reforms.

Washington, T. Nicole, conversations with members of the Florida State Legislature. Informal discussions with current and recent past members of both the senate and the house, including policy chairs during the spring 2018 Florida legislative session.


Ibid

U.S. Census Bureau, American Community Survey (ACS) https://www.census.gov/programs-surveys/acs/, 2016. The ACS helps local officials, community leaders, and businesses understand the changes taking place in their communities. It is the premier source of detailed population and housing information about our nation.


