RESEARCH BRIEF

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STUDENT ACHIEVEMENT INITIATIVE 3.0

Introduction

In 2016, the Washington state community and technical colleges embarked on a five-year review of its performance-based funding (PBF) system, the Student Achievement Initiative (SAI). The review was consistent with national experts' recommendations for continuous evaluation of PBF systems to ensure its overall goals and principles are being met and to incorporate best practices. The effort, which included a wide range of college stakeholders, was led by the college presidents with support from the State Board for Community and Technical Colleges (SBCTC). The review was the second in the history of SAI since its initial implementation in 2007. With SAI now beginning its third iteration, it's referred to as "SAI 3.0."

The following research brief describes the general principles behind PBF, the history of the Washington community and technical college system's SAI, and the key student success policies that stimulated the evolution and growth of SAI 3.0 into a sophisticated system and national model.

Performance-based funding

The primary objective of PBF is to incentivize a focus on student outcomes versus enrollment inputs by attaching a portion of the state allocation to measures of performance. These outputs or performance indicators represent key points in a student's educational path, such as completion of developmental coursework, college-level credit accumulation, and credential completion. PBF has its roots in resource dependence theory which postulates institutions of higher education, whose ability to operate relies on the state appropriation, will adapt their behavior to achieve the outcomes that best protect their funding. As the public's interest in accountability for higher education continues to grow, PBF is becoming a more commonly accepted policy instrument for institutional improvement. As of 2016, two-thirds of states either established or are developing some form of PBF model.ⁱ

States that utilize PBF systems vary in model design

and experience and have changed over time. Early PBF systems (commonly characterized as "PBF 1.0") were typically implemented as a "top down" approach by institutional leaders or state legislatures. Systems were usually funded through a bonus or "new money" model which was above and beyond a college's base allocation and often represented a small amount (less than 1 percent) of the state appropriation. The metrics used to evaluate performance were usually complicated and in many cases did not tie directly to state attainment goals. Many systems developed under 1.0 principles have either been significantly revised or discontinued altogether due to problems with their implementation.

Over time researchers and policy experts have studied earlier models, drew lessons from those that failed or persevered, and established new best practice principles for design and implementation. PBF systems that incorporate these principles are often referred to as "PBF 2.0." As outlined below,ⁱⁱ suggestions for improvements emphasize strategies to engage stakeholders, recognize institutional differences, and align funding and student success policies:

- Established completion or attainment goals and related priorities. This concept provides a framework for which institutions can base their fiscal policy of allocating money on the basis of performance.
- Stable, formula-driven, and sustained funding structure (base funding). The bonus funding methodology in 1.0 models proved to be problematic in providing enough of a financial risk to institutions to truly influence behavior. In addition, in difficult fiscal times, bonus funding can easily be cut from the state budget allocation. The recommendation to make PBF part of the base allocation insulates against changes in the fiscal environment and provides a level of stability and predictability preventing significant uncertainty and harm to an institution.
- Significant level of funding. The low level of funding within 1.0 systems also lacked the

degree of financial incentive to have a significant impact on institutional behavior. Policy experts recommend at least 25 percent of the base allocation as a significant level of funding to impact change.

- Inclusion of all public institutions in both twoyear and four-year sectors and differentiation of metrics and their associated weights by sector. This principle allows for all types of institutions to be included in a state's PBF system, but gives flexibility in utilizing metrics that best align with differing missions and institutional contexts.
- **Prioritization of underrepresented students.** This is a critical design principle that is studied in further detail in the following section and throughout the remainder of this brief.

Equity in performance-based funding

The need to focus on the equity gap is well recognized within the growing body of literature around PBF. The increasing alignment with the national completion agendaⁱⁱⁱ has further emphasized the importance of credential completion, but with this focus comes concerns about serving at-risk populations. National best practice models call for this work to counter the growing concerns regarding unintended consequences for paying for performance. Institutions under pressure to perform and protect funding may, intentionally or unintentionally, avoid enrolling and/or focusing efforts on students at the highest risk of not succeeding. This practice (commonly referred to as "skimming") may result in larger equity gaps in access to higher education, since the population of academically at-risk students is commonly over-represented by low-income, first generation, and students of color.

There is some evidence this skimming happened even in states with sophisticated models (according to typology) by way of increased selectivity, fewer Pell students enrolling, and less funding per FTE for minority-serving institutions.^{iv} In addition, institutions serving large numbers of at-risk students worry that the concept of PBF perpetuates the opportunity gap or creates unequal access to resources. If an institution loses funding because of poor outcomes due to a large number of hard-to-serve students, cuts to funding make it even more difficult to improve. In other words, institutions that need the most resources for advising, tutoring, and other support for student services can be at risk of inadequately serving their population in a PBF model designed to financially penalize poor outcomes.

Citing these concerns, policy experts suggest the most sophisticated type of PBF models include bonus funding or extra weighting for high-risk populations. This principle serves to not only avoid the unintended consequence of skimming but actually provides an incentive to enroll more at-risk students and support them through to completion. For that reason, many models provide extra focus for at-risk students by progressively weighting each outcome metric milestone all the way to completion. Many policy experts who have studied the effects of PBF policies are skeptical about its impact on outcomes overall, but believe there is a possibility for it to have a neutralizing effect for the achievement gap^v. As the focus on equity continues to grow, particularly with respect to funding policy, it is imperative more research be done to evaluate the effectiveness of the effort.

Student Achievement Initiative history

Washington state's community and technical colleges' first experience with PBF was in 1997 where a budget proviso was introduced then discontinued when it was not renewed in the following budget biennium because of state budget cuts. In 2006, the State Board for Community and Technical Colleges adopted the Student Achievement Initiative (SAI) following a period of study and discussion with national experts. The first iteration of SAI included many features of national 1.0 models: a series of progressive metrics to recognize all mission areas and a small amount of bonus funding (less than 1 percent of state appropriation). The achievement points were assigned a dollar amount in advance, and colleges received funding if they improved above and beyond their own performance compared to the previous year.

The SAI model attempted to remove any competition between colleges, which was an important principle for college stakeholders as this policy began. The funding structure was built under the assumption that the system would receive new money in the 2009-11 biennium. Due to the dire fiscal situation caused by the Great Recession, however, the state did not add additional funds. The \$4.5 million budget proviso remained in the state appropriation, though, and the college system was forced to carve the funding out of its base allocation. This meant the colleges competed for funding despite the system's initial efforts. This conflict of policy versus principle caused angst and distrust of the SAI system among college leaders, especially during the fiscal crisis caused by the recession.

SAI 2.0

In 2012 the college system, in conjunction with an evaluation by the Community College Research Center (CCRC), conducted a five-year review of SAI. The results of these reviews led to several changes to SAI, now known as SAI version 2.0.

Recommended changes to SAI reflected a shift in both student success and fiscal policy that recognized both the growing national emphasis on the completion agenda and the constrained resource environment caused by the recession. A significant finding from the review revealed the structure for underprepared students (those in basic skills and developmental education) did not provide enough incentive for colleges to move these students into college-level courses. In response, 2.0 included a bonus point for each milestone metric for basic skills students and one bonus point for developmental students once they completed college math and English. In addition, points were only awarded when students reached the end of the precollege sequence instead of for every precollege course completed. An increased focus on retention and structured pathways resulted in a new point for 45 credits in either a transfer or workforce pathway.

Having learned from the issues with the funding structure within the context of the Great Recession, the funding model for 2.0 was significantly revamped to insulate against financial instability. The model did not depend on new funding but rather came through a base "set-aside" equal to the proviso amount. Colleges earned funding based on their share of performance in the areas of productivity (total points less completions), efficiency (points per student), and completions (degrees, certificates, and apprenticeships). The total amount of performance funding was still comparatively small (less than 1 percent of state appropriation) but the component parts better reflected the system's priorities.

To find the right balance of risk and incentive, policy experts recommend gradually increasing the percent of funding dedicated to performance over time as well as building it into the state allocation formula.^{vi} This approach stabilizes the funding from the influence of budget cuts by making it part of the base allocation. In 2015, the college system aligned with this best practice principle by moving SAI into a new allocation model and increasing the share of performance to 5 percent of the appropriation.

SAI 3.0

In November 2016, the community and technical college system began another five-year review. College presidents and representatives from the instruction, student services, research and planning, and business affairs commissions comprised the review's advisory committee. The review was separated into two phases with an evaluation of the achievement metrics first and the funding metrics second. The advisory committee began by reviewing performance funding best practices and policy guidance at a national level and the Washington colleges' experience. Following the overview, the group engaged in a robust discussion about emerging issues, concerns with both the achievement and funding metrics, and guiding principles for the work. These discussions led to the following framing questions for analysis:

Achievement metrics

- The current metrics do not explicitly address the equity gap. Is this something to consider, and if so, which groups should be included in a separate category?
- Is there a way to capture the progression of students in basic skills and precollege that aligns with other student success frameworks (e.g., WIOA and Guided Pathways)?
- Are there other gatekeeper courses besides math and English that research shows are either launch points to completion or barriers that require additional support for students?

Funding metrics

- Should underrepresented students be given extra weight in the SAI funding model?
- Should all students count in SAI, or should it be limited to state-funded students only?
- Is efficiency, represented by points per student, an appropriate element of the SAI funding model?
- Is the amount of funding dedicated to completions significant enough? What is the impact to colleges with large populations of underrepresented students when completion value is increased?
- Is the overall amount of funding dedicated to

SAI significant enough?

In addition to the analysis questions, the advisory committee established a set of overarching principles to guide the work. These emphasized increasing completions and closing the equity gap — policy goals of the college system:

- The initiative supports improved educational attainment for students, specifically degree and certificate completion.
- The initiative allows colleges flexibility and supports innovation to improve student achievement according to their local needs.
- The initiative accounts for opportunity gaps for underrepresented students and provides incentive for colleges to close the achievement gap.

Analysis

The advisory committee engaged in a deep evaluation of the policy principles by studying achievement gaps not only within the existing SAI system but for each proposed new metric (point). This was a critical analysis because it highlighted areas where recommended changes had the potential to either help or hinder the equity gap problem.

To further reinforce the focus on college-level attainment and completions, the advisory committee recommended adding a new achievement point for English/Communication and one for STEM course completion. These changes were modeled into a test database which the committee then reviewed and disaggregated by mission area, gender, full/part time, race/ethnicity, and low-income status.

The results showed that low-income (as measured by lowest SES category¹), historically underserved students of color (non-white, non-Asian), and students who begin in basic skills are less likely to earn collegelevel points, in particular the proposed new STEM course point. Further, low-income and students of color were less likely to complete a credential. The exception to the completion point likelihood was that students of color are more likely to complete short-term certificates. Research within the college system^{vii}, as well as nationally, shows low labor market outcomes for students who leave college with only a short-term certificate. The committee took this into account and decided not to create an incentive for programs in a certificate level that may not lead to a living wage job. Additional analysis revealed that the first 15 college credits is a primary matriculation point for students, especially those who identify as Hispanic. Figures 1 and 2 are examples of the data evaluated that led to the recommendations.

As a result of this analysis, the committee did not recommend adding a new STEM course completion point but recommended adding a new English/ Communication point. Further, the committee recommended the premium (extra) point be awarded for those underrepresented groups of students at both the first 15 credit point and the completion of degrees and apprenticeships (no certificates).

Figure 1. Historically underrepresented students of color



financial aid are coded and every student needed to be included, and b) Pell students do not show an achievement gap.

¹ Low income is typically measured by Pell grant recipient status in other PBF systems. This proxy does not work in the Washington community and technical system because a) only students on



Figure 2. Low income

Funding Model

Once the advisory committee established the groups to earn bonus points, they reviewed a series of data analyses that estimated the possible impacts of making principle-driven changes to the SAI funding metrics. This analysis is a critical step in any PBF change evaluation in that principles must be tested to ensure they do not conflict with one another. As stated through the initial framing questions, these possible changes included providing additional weighting for underrepresented students, increasing the amount of the allocation for SAI, decreasing the proportion of the SAI allocation dedicated to points per student and increasing the proportion for completions, and including only state-funded students in SAI. The following sections summarize the findings from the committee's review of the funding analysis and subsequent recommendations for adjustments to the funding model.

Student populations and equity

Through the funding analysis, the committee discovered a conflicting relationship between the new equity principle about closing achievement gaps and increased focus on completions and college-level attainment. Similar to concerns identified in other state PBF models, the committee theorized that increasing the amount of funding for completions might negatively impact colleges with a large number of underprepared and historically underrepresented students. A key piece of the analysis was the impact of dual enrollment students (primarily Running Start). These are high performing students and the recommended changes to the achievement metrics put more weight on college level points (specifically the new college English/Communication course point). This provides an advantage to colleges with large populations of dual enrollment as those students earn on average more points per student. Because points and funding are distributed based on a share, this type of distribution would result in a small negative impact for colleges with large populations of underrepresented students (specifically basic skills), as well as for technical colleges who have relatively few dual enrollment students.

The potential overweight of points for dual enrollment students in the new metrics conflicted with the goal of increasing emphasis and incentive to serve more underprepared students. Even with the premium points added for the first 15 credits and degree/ apprenticeship completion, colleges with a high percentage of historically underrepresented students did not appear to be able to counter the impact of the high performing students by way of dual enrollment. In addition, any possible future percentage increases in funding for SAI would shift more money to colleges serving more of the most prepared students, rather than the other way around, which would be counter to the new principle around equity.

In SAI 2.0, dual enrollment are the only type of nonstate-funded students included in SAI (international and Department of Corrections have never been included in the SAI student population). The funding metric analysis revealed that when dual enrollment students are removed from the funding model, the small negative impact in funding for colleges with higher basic skills populations is mitigated and technical colleges show a positive funding impact. Consequently, the committee recommended removing all non-state funded students from SAI to create more parity for colleges with a greater share of underprepared students. With this recommendation, the majority of students removed from the current SAI model are dual enrollment, primarily Running Start.

Amount of performance funding and component parts

To address the questions of how much funding should go towards performance, the committee reviewed another series of analyses that tested the impact of:

- increasing SAI dollars in the context of the full allocation model
- changing the amount of funding in each of the funding metrics of total points less

completions (45 percent), points per student (45 percent), and completions (10 percent)

Through this analysis the committee identified several key points. First, increasing the total amount of performance funding in the allocation model beyond the current 5 percent would require shifting dollars from other components of the allocation model, specifically the enrollment base. The analysis showed that simply moving money from one area of the allocation model to another would cause a shift in a college's performance allocation related more to its enrollment make up and student populations than its performance. For example, SAI 2.0 included dual enrollment students in the performance funding, but did not include them in the enrollment funding of the allocation. Therefore, an increase in performance funding allocation would mean attributing more state funds to those colleges with high numbers of dual enrollment students. In addition to the equity concern identified within dual enrollment stated above, this finding led to the decision to limit the student population eligible for performance funding to statefunded students only in SAI 3.0.

Second, limiting funding for the points per student metric would be necessary to not unevenly favor smaller colleges. This is because points per student does not depend on the number of students served. It therefore functions similarly to enrollment base by providing more per student funding for colleges who serve fewer students. Points per student funding would need to stay close to its current level within the total allocation model (2.25 percent) to not significantly redistribute money between larger colleges and smaller colleges. Third, the analysis revealed that increasing the amount of the SAI allocation for completions from 10 percent to 20 percent met the goal of increasing the focus on completions while not causing harm to colleges on the basis of their size or other college-related characteristic. In fact, combined with the extra weight for degree and apprenticeship completions for historically underrepresented students, this shift represents a commitment towards the new equity principle for SAI, which accounts for the opportunity gap and provides incentive for colleges to focus on closing the achievement gap.

In summary, the committee determined that any funding increase beyond 5 percent of the total allocation impacts other areas of the allocation model. The amount of funding that would move into SAI decreases the amount available to be distributed by base enrollment and weighted FTE. Analysis showed that, regardless of the size of the increase, districts with a significant amount of basic education weighted FTE tend to be negatively impacted. This redistribution can potentially create a sense of competition between colleges, which could cause angst during periods of lower enrollment and uncertainty in budgets. The committee concluded that the recommended changes to the achievement metrics and other aspects of the funding model will introduce enough change and that increasing the percentage at this time would create more instability than can be tolerated given the relative newness of the allocation model. As SAI 3.0 is fully implemented, it will be important to monitor student outcomes, particularly equity gaps, to assess the effectiveness of the new principles and policy.

ⁱ Cielinkis, A. & Pham, Duy. (2017). Equity measures in state outcomes-based funding: Incentives for public colleges to support low-income and underprepared students. *Center for Postsecondary and Economic Success*. Available

https://www.clasp.org/sites/default/files/public/resources-and-publications/publication-1/Equity-Measures-in-State-Outcomes-Based-Funding.pdf

ⁱⁱ Synder, M. & Fox, B. (2018). Driving better outcomes. Fiscal year 2016 state status & typology update. Washington, D.C., HCM Strategists. Available http://hcmstrategists.com/drivingoutcomes/wp-

content/themes/hcm/pdf/2016-Report.pdf

^{III} Friedel, Janice N., Zoe Mercedes, Mark D'Amico, and Stephen G. Katsinas. (2013). *Performance-Based Funding: The National Landscape*. The University of Alabama Education Policy Center. Retrieved from http://edpolicy.ua.edu/research/pbf/

^{iv} Hillman, N., & Corral, D. (2017). The Equity Implications of Paying for Performance in Higher Education. *American Behavioral Scientist*, 61(14), 1757-1772. Kelchen, R., & Stedrak, L. J. (2016). Does Performance-Based Funding Affect Colleges' Financial Priorities? *Journal of Education Finance*, 41(3), 302-321.

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^v Gándara, D., & Rutherford, A. (2017). Mitigating Unintended Impacts? The Effects of Premiums for Underserved Populations in Performance-Funding Policies for Higher Education. *Research in Higher Education*, 1-23.

^{vi} Harnisch, T. (2011). Performance-based funding: A re-emerging strategy in public higher education financing. American Association of Colleges and Universities. Available http://www.aascu.org/uploadedFiles/AASCU/Content/Root/PolicyAn dAdvocacy/PolicyPublications/Performance_Funding_AASCU_June20 11.pdf

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vii https://www.sbctc.edu/collegesstaff/research/reports/default.aspx





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