Key Considerations for a Strong Workforce Program Incentive-Based Funding Structure

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On January 6, 2017, the 17% Committee met for the first time to discuss the design and implementation of an incentive-based funding (IBF) model that will be used to distribute 17%, or $34 million, of the Strong Workforce Program (SWP) funding. The goal of the new funding is to incentivize student completion and employment outcomes in high-demand, high-wage career and technical education (CTE) programs in California's community colleges.

In both the full group discussion and through smaller breakouts, the 17% Committee discussed various performance-based funding models. Through this discussion, the 17% Committee expressed a preference for the performance-contract model, identified possible ways to adapt this approach to California and SWP goals, and created a series of questions that could help inform the design of an IBF system in California.

This white paper addresses the committee's questions based on conversations with Chancellor's Office staff, interviews with representatives from six states that have implemented performance-based funding systems (Indiana, Louisiana, Ohio, Tennessee, Texas, and Washington), and an interview with Dr. Kevin Dougherty, Professor of Higher Education and Education Policy at Teachers College at Columbia University, who has done extensive research on performance funding.

Strong Workforce Committee Values

This 17% Committee articulated the following system goals and values at the first meeting in January, based on the recommendations of the Strong Workfoce Task Force:

- Make long-term investments.
- Take calculated risks to drive innovation.
- Prioritize deliberate, thoughtful actions.
- Engage in continuous improvement, measured against past performance.
- Emphasize rewards, not punishments.
- Encourage collaboration, not competition.
- Ensure maximum flexibility and local decision-making.
- Encourage shifts in overall college investments.
- Engage with employers to ensure alignment of programs and curriculum with regional labor market demand.
- Ensure that employers can confidently hire workers trained at community colleges.

The committee recommended that the incentive-based funding system adopted in California should reflect these values—and this advice was underscored in the interviews. Representatives from Washington and Texas, as well as the PBF expert, noted that if the funding model reflects the values and desires of the system, it is more likely that these values will be adopted and integrated into institutional cultures at all levels of the system. These shared goals, more than a list of metrics, are likely to drive change. Therefore, the sections below refer back to these values as a yardstick for evaluating possible IBF components.

Key Components of PBF Systems

During the first committee meeting, many committee members expressed interest in a performance-contract model, where colleges select metrics from a list and set targets for improvement over time. Therefore, many of the questions identified for the interviews with other states relate to this model, such as whether colleges are expected to return funding to the state if they do not reach their goals, minimum thresholds for improvement, and if colleges are expected to improve outcomes each year.

However, one striking finding from the interviews was that the performance-contract model has not been successfully implemented. The PBF expert stressed the failure of the approach, as did the representative from Louisiana, the one state that had attempted a performance-contract model at scale. Specifically, the state found that linking goal-setting

to financial incentives resulted in colleges setting their targets as conservatively as possible. Furthermore, due to a cut in higher education funding that happened at the same time that the model was implemented, the colleges that set more ambitious goals ended up receiving less funding.

Instead, all of the states that were interviewed (including Louisiana) are now implementing outcomes-based systems, where either points or dollar values are ascribed to each student who achieves specific milestones and completion outcomes. Outcomes are measured at the institutional level, and colleges are not allowed to select which metrics apply to them. No funds remain at the end of each year to be banked against future improvements, nor are colleges expected to return funds to the state. The section below provides additional detail about how PBF has been implemented in the states that were interviewed.

Funding Distribution Models

Louisiana, Ohio, Tennessee, and Washington all have funding systems where institutions compete for a share of funds. Each institution's share of the funds is based on their performance, with points being assigned based on the number of students who attain each outcome. Indiana uses a variation of this approach. First, the state creates a count of the outcomes that were achieved at each institution. Then, once the total budget amount is established for higher education, the state assigns a specific dollar amount to each outcome and distributes funds accordingly.

In two cases, states also incentivize improvement over time. In Tennessee, colleges are evaluated in comparison to outcomes in the baseline year. In Indiana, colleges are evaluated based on performance compared to a prior period, using three-year rolling averages.

Performance-Based Funding Amounts

In our interviews, we asked about the proportion of the budget that each state dedicates to performance-based funding. The amounts varied significantly. In Ohio and Tennessee, 100% of funding is allocated based on student outcomes, which as the states' representatives noted, requires institutions to take these measures seriously and adjust institutional behavior in accordance with the incentives built into the formula. However, other states offer intermediate amounts, for example Louisiana's system is 15% performance-based and Indiana's system is 6% performance-based.

Washington allocates 5% of its funding based on performance (up from 1% in 2012). While the amount is modest, PBF has expanded the college focus from just enrollments to also prioritizing student outcomes, leading to greater adoption of institutional reforms and continuous improvement models. The Washington representative felt this shift in dialog

was significant given that most funding is still based on apportionment and the colleges are in a period of declining enrollments.

The PBF expert suggested that the amount allocated to performance funding may be less important than alignment with state values and institutional missions, clear messaging about expectations for institutional performance, and efforts to build institutional capacity to meet state goals. While there is a large focus on financial impact during the planning phase, the switch in funding models creates a symbolic opportunity to define what matters most.

Phase-In Periods

Although many states incorporated a phase-in period for the implementation of their models, others did not believe it was necessary. Under Tennessee's system, where institutions are measured in relation to their outcome in a baseline year, there was no phase-in period because the system did not create a significant fluctuation in funds. Similarly, Texas calibrated the amount that institutions received in the first year to what they had been receiving under the previous funding system as a way to keep funding relatively steady.

Washington, which had already been implementing PBF, had six months to phase in its current model, during which the state agency conducted outreach to colleges and engaged with institutional researchers to scrutinize the outcomes and associated points that had been assigned. This helped to mitigate unintended consequences that were not apparent until concrete data could be analyzed. In addition, Washington gave colleges a "learning year" so practitioners had time to understand the new model and offer suggestions on ways to improve it. The representatives from Indiana, Ohio, and Tennessee also stressed the importance of having high-quality and credible data. One state noted that implementing PBF had resulted in considerable effort to improve data quality in both local and statewide systems.

Ohio implemented its 100% PBF model over a period of a couple of years, during which the state agency actively engaged practitioners. For example, institutional researchers and chief budget officers examined data on the model and provided input that shaped the final model.

Employment and Earnings Measures

Most PBF systems focus on attainment of interim milestones and on the completion of degrees and certificates. The only systems where employment and earnings measures are being used in performance-based funding are Tennessee and the Texas State Technical Colleges. Tennessee tracks whether graduates are placed in a job, but only for colleges with significant CTE offerings. Texas' approach only applies to technical colleges, which offer a limited menu of CTE majors, and focuses on the amount by which graduates'

earnings exceed the minimum wage. Texas, which has examined the economic outcomes for students after implementing PBF, found that graduation rates, job placement, and salaries have improved.

Although several states indicated that they are contemplating adding employment or earnings measures—and the PBF expert identified economic indicators as the next frontier in performance models—the states we interviewed listed several barriers. For example, some did not have access to wage records in their own state, while others had many graduates who moved to neighboring states and did not have access to those wage records. Some felt that it made their models too complex, and others were concerned about integrating employment measures given that colleges have little control over economic conditions.

According to the PBF expert, it is difficult for states to incorporate measures into their funding formula that put some institutions at a disadvantage. For example, students who attend community colleges that are located in relatively depressed labor markets might have difficulty finding work or attaining high wages, while those in a booming economy would have stronger outcomes. In addition, employment and earnings measures can be particularly volatile, and both states and individual institutions are wary of anything that contributes to large fluctuations in funding.

In addition, most of the people interviewed seemed unfamiliar with how funding for Carl D. Perkins Vocational and Technical Education Act (Perkins) and the Workforce Investment and Opportunity Act (WIOA) were being implemented in their states, and so may not have been aware of how employment and earnings measures may be impacting CTE programs in other ways.

Identifying Key Components for California's IBF System

In order to provide guidance on an incentive-based funding model for the Strong Workforce Program that reflects its overarching values, the 17% Committee will need to weigh a number of variables that have proved critical to performance models in other states. The section below describes what was learned in the interviews, and then lays out a number of possible adaptations for the California context and the goals of the Strong Workforce Program. These key components include: funding stability, frequency of evaluation of measured outcomes, level of evaluation of measured outcomes, evaluation weights, and interim progress measures.

Funding Stability

In several states that were interviewed, higher education budgets were cut at the same time that PBF was implemented, which meant that funding was reduced for institutions that did not attain strong student outcomes. Interviewees felt that this aspect of the

funding model had a negative impact on long-term planning, risk-taking, and continuous improvement efforts and was viewed as punitive. Most states responded to this unintended outcome by instituting revised rules that provided for a consistent level of base funding or a phase-in period for funding reductions. For example, Tennessee's system measures institutions based on their current performance. Therefore, institutions only lost funding if there was a decrease in outcomes. In advance of implementation in Texas, they calibrated the rate that institutions would receive in the first year (based on their current rates) to what they were receiving under the previous funding system. As a result, institutions did not experience large increases or decreases in funding when the new formula was implemented.

Options for California

Because the $34 million in IBF represents a small portion of overall college (and CTE) funding, and is associated with a new funding source, it is unlikely to cause the level of instability experienced in other states. However, because colleges received the full $200 million in the first year, implementation of the IBF with the 17% of SWP funds will function as a funding decrease for those colleges that do not attain significant student outcomes.

One way to reinforce the SWP values would be to clearly separate the $166 million from the $34 million, and to make the $166 million as stable as possible to allow colleges to make longer-term and higher-risk investments. In this way, the 17% can serve as a true incentive, by giving colleges extra funds to further practices that are resulting in improved outcomes, such as ensuring colleges are responsive to employers and aligning curricula with regional labor market needs. This might also help to minimize competition among colleges to secure funds, as the 17% could be framed as an additional incentive.

Frequency of Evaluation

Another fundamental variable that may affect long-term planning, risk-taking, and continuous improvement is the timeframe in which the incentive funding is reset. Some states, such as Louisiana, Ohio, and Washington, review outcomes each year and recalculate funding levels. This allows the funding to be tightly linked with recent improvements as a driver for continuous improvement. Others, like Indiana, use a two-year cycle, which reduces both state and local workloads and allows for longer-term planning and risk-taking, and aligns college planning with state budget cycles.

In addition to variability in the frequency of review, states also take different approaches to the timeframe of the outcomes that are being evaluated. According to the PBF expert, many states are using three-year moving averages to evaluate progress, like the model currently used for Perkins funding in California. This extended timeframe minimizes year-to-year fluctuations in the data. According to the Tennessee

representative, this timeframe also provides a greater sense of security because funding is likely to be more stable. The Ohio representative noted that the three-year rolling average gives institutions time to plan and prepare if they are not improving outcomes, so that they can implement interventions or plan for funding decreases.

According to the PBF expert, one potential drawback of using a three-year average is that funding levels do not keep pace with the changes that are occurring within institutions. For example, both the Ohio and Texas representatives noted that if enrollment grows rapidly, infrequent review of outcomes results in funding not keeping up with institutional needs.

Indiana also uses a three-year rolling average, but rather than just look at absolute performance in this timeframe, the state compares the average to prior outcomes. For example, they compared the average from 2013-2015 to the three-year average from 2010-2012. However, this extended timeframe was perceived as too long, and the suggestion was made that it would be preferable to compare overlapping rolling averages (such as 2013-2015 compared to 2012-2014).

The Texas State Technical System, the only example that included employment-related metrics, resets funding every year. However, because student earnings are measured over a five-year period after students leave college, there are considerable time lags in evaluating program outcomes.

Options for California

Because the Strong Workforce Program legislation requires alignment with WIOA employment and earnings measures, and because the Chancellor's Office elected to include transfer as a metric, lag time will be an additional factor when addressing timing issues. Three possible options are described below:

	Promotes long term thinking	Gives time to accomplish goals	Aligns with college processes	Simplifies budget tracking	Minimizes workload	Aligns measures with plans	Resets rewards frequently
Four-Year Cycle							
Two-Year Cycle							
One-Year Cycle							

Establish a four-year funding cycle, with the outcomes of college plans measured directly. A four-year cycle would allow for three years of data to be captured on course enrollments and completion and two years of data to be captured on transfer, employment, and earnings. The fourth year would allow time for college outcomes to be reported, transfer and employment data matches to be conducted, and funding revisions to be calculated. Rolling averages could be calculated based on the data from available years. This model would be most likely to reward long-term thinking, risk-taking, continuous improvement, responsiveness to employers, and alignment of curricula with regional labor market needs.

Establish a two-year funding cycle, with the outcomes measured for students in years prior to the funding plans. Because insufficient time would have passed for outcomes to be calculated, course enrollments and completion would be measured for two years before the two-year cycle, or if a rolling average was used, for the years two-through-five prior to the two-year cycle. Transfer, employment, and earnings would be measured for four years before the two-year cycle, or if a rolling average was used, numbers for years four-through-seven prior to the cycle. A two-year cycle would emphasize continuous improvement, with room for longer-term and riskier investments. This model would still help to emphasize the importance of employment outcomes, with weak links to responsiveness to employers and alignment of curricula with regional labor market needs.

Establish a one-year funding cycle, with the outcomes measured for students in years prior to the funding plans. Because insufficient time would have passed for outcomes to be calculated, course enrollments and completion would be measured for two years before, or if a rolling average was used, for the years two-through-five prior. Transfer, employment, and earnings would be measured for four years before, or if a rolling average was used, numbers for years four-through-seven prior. This model would still help to emphasize the importance of employment outcomes, but would less directly address responsiveness to employers and alignment of curricula with regional labor market needs.

Level of Evaluation

Most of the states we interviewed measure and evaluate student outcomes at the institutional level and did not make distinctions between CTE and non-CTE programs. Not only are the measures intended to improve overall college outcomes, many states felt that it was too complex to break out results at the program-level. For example, Washington puts significant emphasis on momentum points toward completion goals, including passing college-level math, which is seen as a critical bottleneck course. The representative from Washington indicated that determining bottleneck courses for each major, particularly CTE majors, was impractical.

Louisiana has also created a tiered system that provides additional funding for programs that lead to high demand, high wage jobs, based on annual projections provided by the state Office of Workforce Development. Ohio considered implementing a similar weighting system, but ultimately chose not to because their top priority was to improve access to higher education. Although not part of the funding formula, Texas recently implemented a money-back guarantee that repays college costs to students who complete an associate degree in one of six high-demand fields.

Options for California

The Strong Workforce Program legislation does not specify the level at which college performance should be evaluated, but does indicate that the Chancellor's Office should pay attention to the outcomes of specific programs in its reports to the legislature. Three possible options are described below. In all three cases, additional weights could be given to TOP codes that align with regional high-demand, high-wage jobs in order to support the legislative requirement that investments reflect labor market analyses.

Evaluate institution-wide outcomes to maximize the degree to which SWP funding is used to leverage shifts in overall college behavior. Colleges would be incentivized to make investments that put CTE more in the center of college strategies for growing enrollments and completion, while making clear that colleges will be evaluated on students' economic outcomes.

Evaluate overall CTE outcomes to emphasize the importance of a strong CTE portfolio while reducing the workload required to document and evaluate outcomes, and to make the model more transparent and streamlined.

Evaluate specific CTE programs, either by having colleges use TOP codes or priority sectors identified under the Doing What Matters framework. This option would allow progress to be measured on only those programs targeted for SWP investments, making it easier to track responsiveness to employers and alignment of curricula with regional labor market needs.

Evaluation Weights

The 17% Committee outlined several changes to institutional behavior and student outcomes that should be prioritized within the incentive structure, including attention to equity, strengthening student support, and regional collaboration.

Equity

Almost all of the states that we interviewed have a mechanism built into their funding system to incentivize colleges to address equity gaps, although the specific approach

varies by state. Tennessee gives greater weight to outcomes attained by older learners (students over 25), low-income students (based on Pell eligibility), and academically-underprepared students (based on a standardized assessment). Louisiana's system includes added weights for older learners and Pell grant recipients. Indiana's system includes additional weights for students who are Pell grant eligible at the time of graduation and Washington's system assigns more points to students who were in adult education. Ohio sought to address disproportionate impact in both access and success by giving additional funding for at-risk groups that attained milestone metrics (adults over 25, students who are Pell-eligible at any time during college, and American Indian, African American and/or Hispanic students). Texas does not give weight to the outcomes of specific student types, but the state representative clarified that this was because most of its students are at-risk (nearly 70% are the first in their family to attend college). Some states are also contemplating additional weights for dual enrollment students.

Despite the assertion by several state representatives that weights are key to the success of their model, the PBF expert reported that research has not isolated the most effective way to structure weights in order to most effectively incentivize institutions to address equity gaps.

Student Support

Although many of the states credited their performance funding systems for galvanizing improvement in student supports, few suggested specific approaches to incentivize these improvements. Rather, states suggested that the emphasis on student progress and completion measures due to performance funding encouraged attention to student services, while giving individual institutions the flexibility to develop the most appropriate strategy for their students. For example, the Tennessee representative described a range of interventions adopted by individual colleges, such as hiring more advisors, creating one-stop shops, and implementing early warning systems. In Ohio, the state desired to incentivize early interventions when students are struggling, and felt that the performance-funding model had been more effective than other, more proscriptive efforts.

This idea was affirmed by the PBF expert. While states may push particular improvement models, such as developmental education reforms or guided pathways, colleges are almost always given autonomy on how to implement these approaches. Furthermore, given the lack of data on which student support interventions are most effective, there is no evidence basis for promoting one approach over another.

Regional Collaboration

None of the states we interviewed had clear models for using performance funding to foster regional collaboration across community colleges, and many felt that a downside of

their funding model was that it promotes competition, particularly in cases where overall higher education funding has been reduced. However, Tennessee has incentivized collaboration between community colleges and four-year institutions by splitting the funding credit in cases of reverse transfer—where students who had transferred to a university before completing an associate degree are given the two-year degree upon completing the necessary requirements at the four-year college. In both Ohio and Washington, the representatives felt that regional collaboration was best fostered through other initiatives that require multi-institution strategies and through college leadership counsels that meet regularly.

Completion Goals

Although not called out by the 17% Committee, two states raised issues regarding their completion metrics. Both Indiana and Washington found that, in order to boost graduation numbers, colleges started issuing many more low-unit certificates. While both states wanted to reward stackable credentials, concerns were raised about the value of low-unit awards, particularly in comparison to longer-term programs. While no official weights have been given, both states are giving greater scrutiny to their short-term awards.

Options for California

Several of the categories used by other states would have to be adjusted for California or could be designed to dovetail with other statewide initiatives, including:

Older Learners - according to a recent study by the University of California at Davis, the average age at which students start CTE programs is 27. Therefore, it may not be necessary to incentivize older learners.

Low-Income Students - other states focus on Pell grant status, but many California students do not apply for Pell grants because it is easier to secure a Board of Governor's (BOG). Therefore, weight might be given to students who receive any type of financial aid. Another advantage to giving weight to those students who have received aid, not just those who are eligible, is that colleges would be incentivized to improve financial aid advising.

Academically-Unprepared Students – the vast majority of California community college students are assessed into basic skills, and with efforts underway to promote alternatives to developmental education, giving weight to test scores might run counter to other Chancellor's Office initiatives.

Adult Education – the incentive funding model could help to reinforce the Adult Education Block Grant program by providing additional weights to students who transition from adult schools. Similar credit could be given to students who transition

from noncredit to credit coursework, particularly as many colleges move to scale up their noncredit offerings under the new apportionment rules.

Disproportionate Impact – greater alignment with the Student Equity Initiative could be created by giving extra weights to colleges that successfully reduce disproportionate impact in access and success, provided that a consistent methodology is implemented for calculating this factor. (Currently, colleges can select one of three possible approaches, which can produce different outcomes.)

Dual Enrollment – given the lack of a flag for articulated credit and dual enrollment students in the Chancellor's Office Management Information System, a proxy, such as students who first enrolled when aged 19 or younger or the less-specific concurrent enrollment flag, would be needed to incentivize this group.

Regional Collaboration – credit could be given to all colleges that had ever enrolled successful students, as one way to encourage colleges to work together to address the Strong Workforce Program outcomes.

Completion – greater weight could be given to high-unit certificates and associate degrees, or to students who earn multiple awards.

Interim Progress Measures

The 17% Committee highlighted the value of including interim measures that would reward colleges for accelerating students' progress toward completion and employment outcomes. According to the PBF expert, many states have used Washington's system to guide the design of interim measures, which include progress in the basic skills sequence, completing 15 units, completing 30 units, and completing math requirements. While the PBF expert noted that there is not yet evidence about which of the interim metrics are most effective, the representative from Washington felt that completing 15 units was a critical measure because so many students stop attending before they reach this milestone. The state considered dropping the math measure for CTE certificate programs, but elected not to in order to incentivize CTE associate degrees, due to their higher earning potential. The Washington representative noted that the state hopes to de-prioritize the basic skills progress measure over time, as more students are placed directly into college-level coursework through a host of developmental education reform efforts.

Options for California

The 17% Committee requested that any interim progress measures added to the Strong Workforce Program Metrics be aligned with other Chancellor's Office or federal measures. Relevant options include:

WIOA: Completing 12 units.

Perkins: GPA of 2.0 or higher in CTE courses.

Federal financial aid: Completing 67% of units attempted and maintaining a GPA of 2.0 or higher.

Accreditation:

- Successful course completion rate.
- Fall to spring retention rate.

Institutional Effectiveness Partnership Initiative (IEPI): Successful completion rate for courses taken in the fall term.

Student Success Scorecard:

- Successful completion of more than eight non-introductory CTE units within a pathway.
- Enrollment in three consecutive semesters (or four consecutive quarters).

Note: the 8+ unit attainment measure aligns with research recently released by the Community College Research Center on critical milestones that have informed guided pathways research. In Tennessee, earning 9 units within a pathway was more predictive of completion than basic skills assessments or race.

In all of these cases, additional metrics would need to be developed to address progress in noncredit courses. Noncredit attendance is measured in terms of contact hours rather than unit attainment and many noncredit classes do not capture information on successful course completion.

Conclusion

At the second meeting of the 17% Committee, several decisions need to be made regarding California's IBF model. These key decision-areas relate to funding stability, the frequency of evaluation of measured outcomes, level of evaluation of measured outcomes, evaluation weights, and interim progress measures. Decisions made during the second 17% Committee meeting regarding the measurement and evaluation components of the IBF model will inform data modeling that will take place between the second and third meeting. WestEd and the Chancellor's Office will conduct an analysis of approaches identified by the committee using data from specific colleges. The purpose of this analysis is to determine how specific elements of the IBF system will impact funding levels at the program- and institution-level.

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