



National Center for Higher Education Management Systems

Utilizing College Access & Completion Innovation Funds to Improve Postsecondary Attainment in California

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Executive Summary

The College Access and Completion Innovation Fund proposed by the Obama administration in the FY 2009-10 budget holds considerable promise as a tool to leverage badly needed change in higher education nationally—and especially in California. It is potentially the most flexible tool among those currently available to promote attainment of President Obama’s goal for higher education: “by 2020, America will once again have the highest proportion of college graduates in the world.”

Presumably,¹ states will have considerable latitude in ways they use funds to further the College Completion agenda. Accordingly, this policy brief has been written with two goals in mind:

- To contribute to the on-going discussion about the design criteria that should be established at the federal level to govern state use of College Completion Program funds.
- To recommend a subset of activities that would do the most to further California’s contribution toward the national goal.

To aid in identifying specific actions that might be taken in California, a comprehensive list of possibilities was developed. Most of these were then eliminated on the basis of judgments about the feasibility of getting them implemented in the California context.

The specific design criteria for the program recommended to the federal government are as follows:

1. Funds should be allocated to state higher education agencies or entities designated to act in their stead.

¹ This is a presumption because the specifics of the program are not yet known.

2. States receiving program funds should commit to establishing College Completion goals that contribute at least each state’s fair share of meeting the national goal.
3. The notion of “college completers” should be broadly defined to include certificates with workplace acceptance as well as associate and baccalaureate degrees.
4. The innovations funded should be designed at scale; they should not be “demonstration projects” that might later be taken to scale.
5. The program should fund state initiatives and should not be a device for distributing resources across the full spectrum of institutions. States should be encouraged to direct investments centrally or towards the types of institutions that can make the greatest contributions to achieving the goal.
6. The program should encourage solutions designed to educate more adults.
7. Funds should be used for one-time purposes; they should not be used to create on-going commitments requiring eventual state replacement of federal funds.
8. The program should emphasize actions taken by postsecondary institutions, not the public schools.

This paper catalogues several approaches to utilizing funds within these criteria. These are of two kinds: approaches that fund activities designed to improve college completion directly and incentives that retrospectively reward institutions for greater success. Those recommended for possible implementation in California include:

1. Develop/adopt placement exams and standards of achievement that establish clear benchmarks for what it means to be college ready in California.

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2. Develop a system-wide approach to delivering developmental instruction.
 3. Engage employers in promoting the importance of further education.
 4. Support the development and widespread acceptance of workplace readiness certifications.
 5. Develop capacity for assessing—and giving credit for—prior learning.
 6. Create a centralized “help desk” of student “case management” specialists to supplement student services at the campus level.
 7. Modify the community college funding model to provide for at least one of the following options:
 - Payment for degree or course completions instead of enrollments.
 - Payment for the achievement of intermediate goals such as completion of Adult Basic Education, developmental education, or the attainment of key credit completion thresholds as well as attaining a credential.

As a prior condition for implementing any of these initiatives, California must develop important elements of infrastructure that are not currently in place. The first is a longitudinal student unit record system that allows students to be tracked from elementary-secondary education into and through postsecondary education. This system should have the capacity to track student and graduate involvement in the workplace as well. The paper argues against using College Completion funds for this purpose because funds can be made available from other federal sources designated explicitly for this purpose. But if California receives such funds, care should be taken to ensure that they are not restricted only to developing capacity in the K-12 sector. The second precondition is an entity or actor that can effectively lead the

initiative, whatever approaches to enhanced college completion are selected. The tasks to be performed by this entity include:

- Establish and build consensus around the state’s College Completion goals.
- Monitor and report annually on progress.
- Develop program implementation strategies.
- Provide oversight for use of funds.
- Use data for planning.

Three options for creating such an entity are presented. The one recommended calls for the state to designate a widely respected non-profit entity to receive the funds, lead the necessary planning activity and put in place the machinery for on-going implementation.

Utilizing College Access & Completion Innovation Funds to Improve Postsecondary Education in California

I. Introduction

In his speech to the joint session of Congress (2/24/09), President Obama clearly articulated a goal for higher education in the United States: “by 2020, America will once again have the highest proportion of college graduates in the world.” In stating this goal, the President added a powerful voice to governors, policy centers, and philanthropic organizations that have argued the need for substantially increased education attainment of the American working-age population. The most prominent of these organizations have been:

- The National Center for Public Policy and Higher Education (NCPPE) and the National Center for Higher Education Management Systems (NCHEMS), which have argued that at least 55% of the adult population will require a postsecondary education of some sort by 2025.
- The Lumina Foundation, which is calling for a 60% postsecondary education attainment rate by 2025—a target consistent with the President’s 2020 goal.
- The Bill & Melinda Gates Foundation, which is putting its considerable resources behind an effort to “double the numbers of (low-income) young people who earn a postsecondary degree or certificate with value in the marketplace by the time they reach 26.”

While the language varies slightly across actors, the call to action is being sounded and the goal is coming into focus. Significantly, this is the first national goal for higher education that has been so consistently and cogently stated for many years.

Generally similar goals have already been established in several states including “double-the-numbers” goals in Kentucky and Arizona, a globally competitive workforce in Minnesota, and “closing the gaps” in Texas. California, as a state, has not established a goal regarding education attainment of its population although various researchers and policy advocates recommended doing so. [See Public Policy Institute of California, www.ppic.org.]

The President not only established a goal but followed it up with initiatives designed for achievement. For example, the proposed FY 2010 budget contains provisions that would significantly expand and modify federal student aid programs, create incentives for institutions to keep tuition increases under control, simplify the Free Application for Federal Student Aid (FAFSA) in order to remove a daunting barrier to student success (especially among first-generation students), and provide grants to create databases that could inform state policymaking.

The item that provides the greatest opportunity for leveraging change is a proposed state/federal partnership to improve college completion, particularly among students from disadvantaged backgrounds—The College Access and Completion Innovation Fund. Few specifics are yet known about this program beyond its proposed size (\$2.5 billion over five years) and the requirement that a rigorous research component must be associated with its expenditure of funds.

In this context, NCHEMS was asked to prepare a policy brief describing how program completion funds might most effectively be used, first in general terms, then with specific application to the State of California. This paper is a response to that request.

II. Suggested Program Design Criteria

Before discussing how program funds might best be utilized, it is necessary to establish some design criteria that broadly establish the “ground rules” within which specific program activities should be fashioned. Among these are the following:

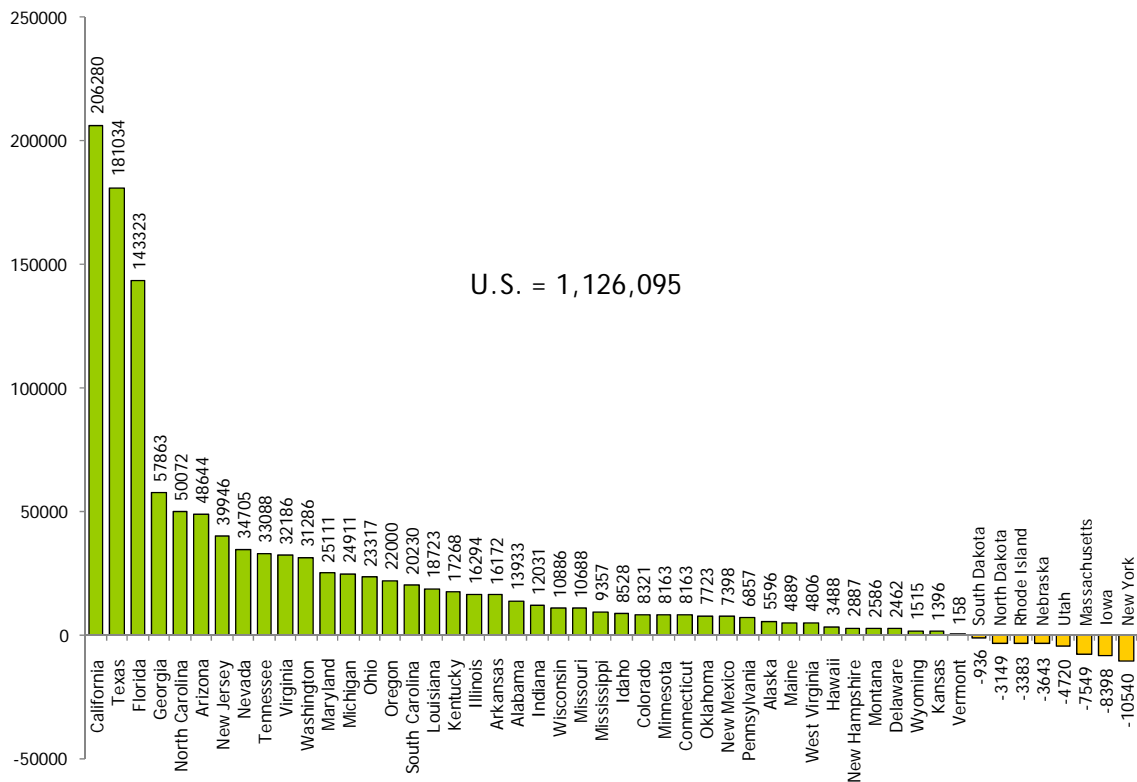
1. **Recipients of funds should be state higher education agencies or other entities designated to provide statewide leadership in achieving substantially increased college completion.** While individual institutions or consortia can and must contribute to the program’s goals, focus should be placed on creating statewide improvements and capacity that can be sustained after the program has run its

course. This requires a recognized statewide higher education authority.

2. **The program should be viewed explicitly as a tool to move the country toward the President’s goal of global leadership in postsecondary education attainment by 2020.** Any state receiving program funds should be asked to commit to doing its fair share to close the postsecondary education attainment gap. The following figure shows how big each state’s contribution would have to be based on:

- Current attainment levels—the proportion of the population that already has a college degree.
- Projected population and demographic changes.

Figure 1. The “Gap” - Difference in Annual Degrees Currently Produced and Annual Degrees Needed to Meet Benchmark – Not Taking Migration into Account



- Current rates of degree production.

This figure reflects the enormously different expectations that must be established for different states in doing their “fair shares.” California, for example, would have to produce 206,000 more undergraduate degrees annually than it does now,² while New York already produces enough degrees to achieve its “fair share” of the national goal. These different requirements suggest one basis for the federal government to allocate program funds: the size of the task to be accomplished rather than some measure of past performance.

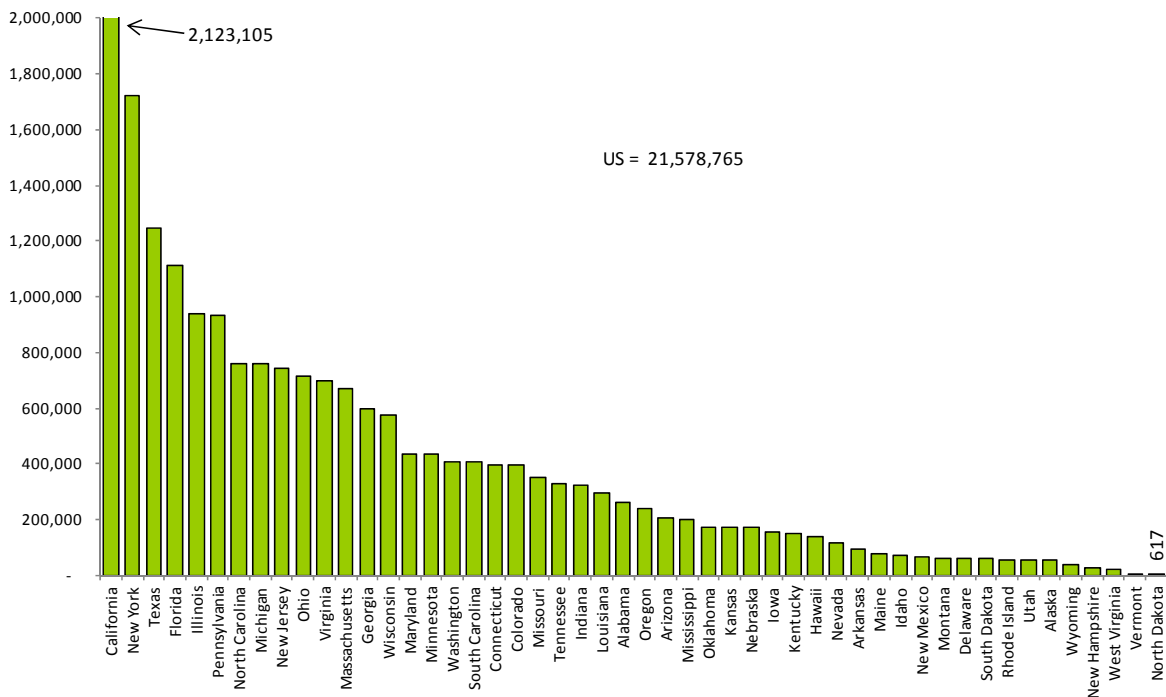
The figure also suggests that a handful of states could meet their shares of the national goal without changing current practice. Rather than let these states

off the hook—and therefore eliminate access to program funds—a second criterion should be applied: the additional number of degrees that would have to be awarded to close the equity gap in the state. Data on this variable are presented in Figure 2. If California were to close its current race/ethnic gap with respect to postsecondary attainment, more than half of its overall deficit would be closed.

3. **“Completers” should be defined broadly.** Consistent with the President’s goal, “completers” should include those who earn:

- Baccalaureate degrees
- Associate degrees

Figure 2. Additional Degree-Holders Needed to Close Racial/Ethnic Gaps Between Whites and Minorities 2005-07



² Current degree production for California is 249,109.

- Credentials that require a minimum of twelve credit hour equivalent units, an externally validated and administered assessment, and recognition by employers in an industry.

In terms of international comparisons, it is the failure of the U.S. to keep pace in the latter two categories that contributes the most to the attainment gap. The U.S. is second in education attainment at the baccalaureate level, tenth overall.

4. **Proposed solutions must recognize the size of the problem.** The problem charted by figures 1 and 2 is enormous, so solutions must be crafted accordingly. This means that solutions must be designed at scale—not designed as demonstration projects with a promise that they will at some point be taken to scale. It is the scalability, not the content of the potential interventions themselves, that needs the most policy attention.

5. **Investments should be directed to those particular institutions and types of institutions that can make the greatest contributions to achieving the national goal.** These institutions would typically include:
 - Broad access institutions that cannot improve their graduation rates by simply becoming more selective. In almost all states this will comprise public community colleges and open access four-year institutions in the public sector. It will typically not include public research universities. Figure 3 indicates the relative dependence of states on these different sectors to provide broad access. California ranks second only to Illinois in depending on community colleges as the point of access for college students.

Figure 3. Undergraduate FTE Enrollment by Sector (2006-07)

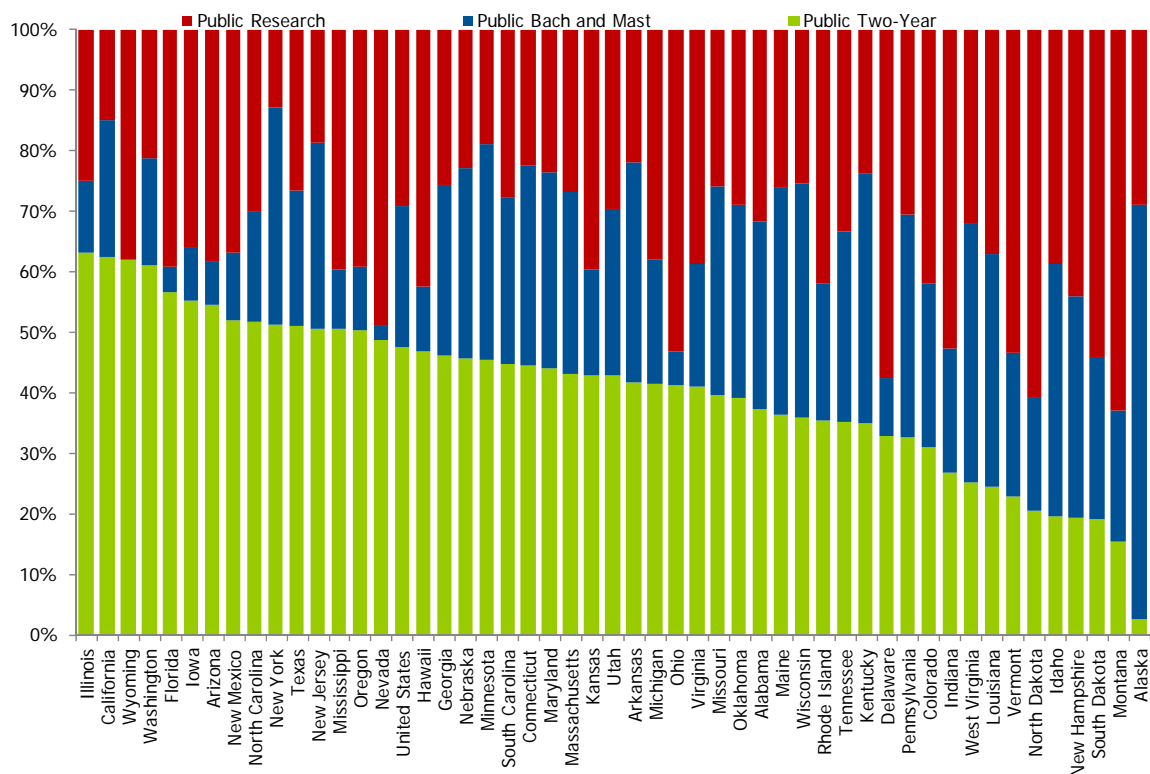


Figure 4. Bachelor's Degrees Awarded per 100 FTE Students, Public Four-Year Institutions (2006-07)

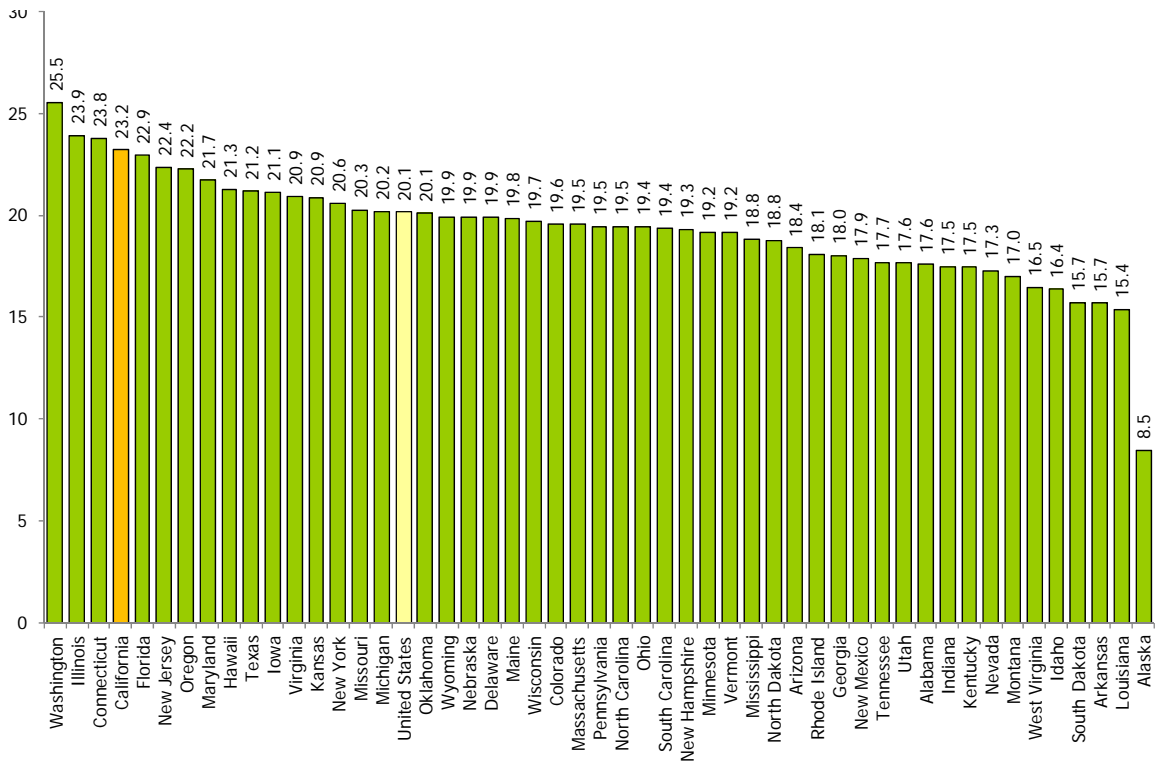
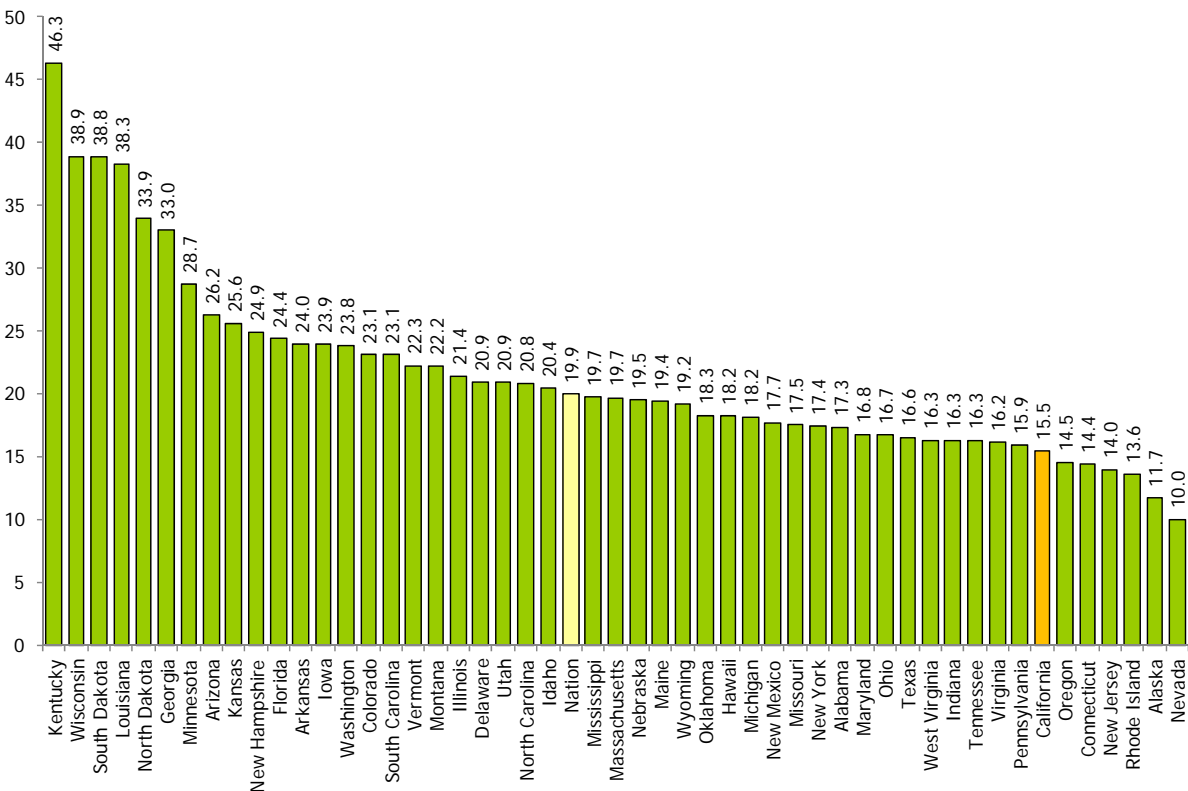


Figure 5. Total Credentials Awarded (Less than Bachelors) per 100 FTE Undergraduates Public Associate Colleges (2006-07)



Public policy should also be open to strategies that leverage the potential contributions of broad access private and especially proprietary institutions.

- Low completion-rate institutions that provide considerable room for improvement. Figures 4 and 5 indicate the extent to which the public four and two-year sectors in each state leave room for improvement compared to the best performing states. In California, degree completion in the community colleges is a particular target of opportunity.
- Large enrollment institutions where even relatively small improvements in degree production rates can translate into large increases in the actual number of degrees and certificates produced.³

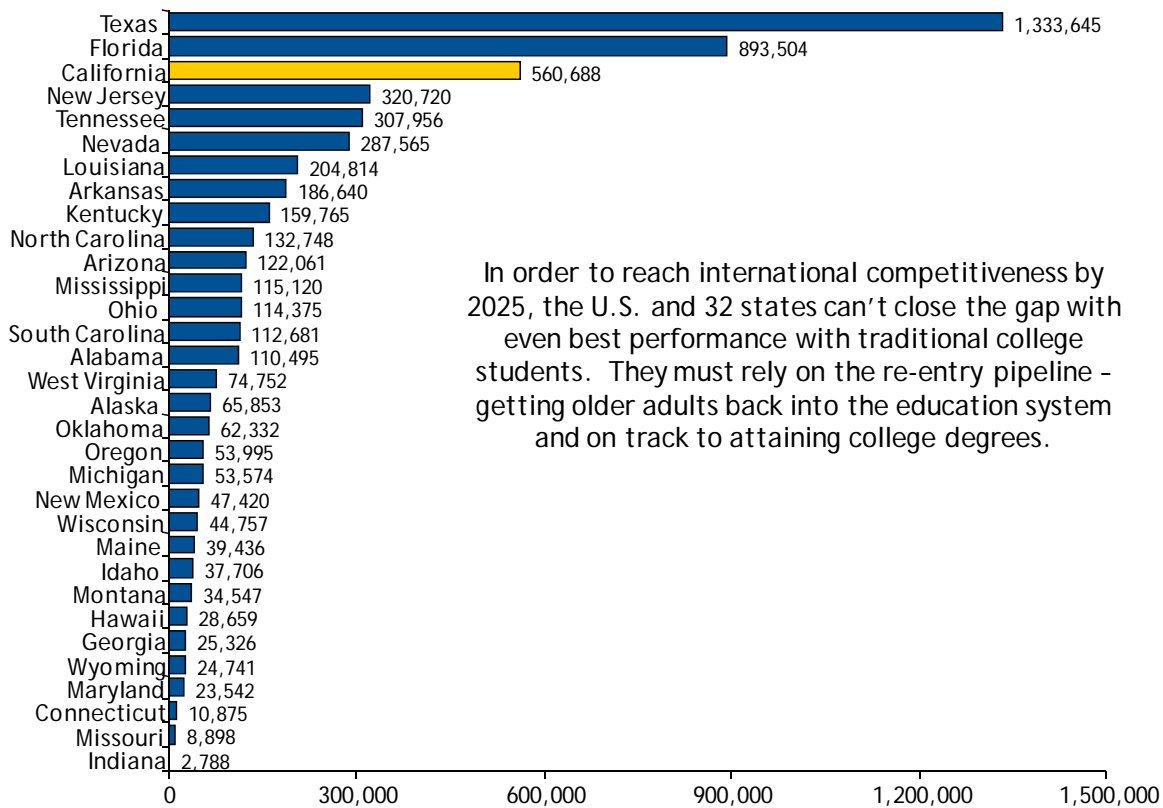
6. **Seek solutions that emphasize educating more adults.** Most state education policy and most institutional strategies designed to enhance degree production focus on traditional college students who enroll right out of high school. But NCHEMS has performed analyses that show that most states cannot attain levels of degree production sufficient to meet the President's goal even if they performed at best-in-the-nation levels with respect to high school completion and college participation and completion. In short, the nation (and most states, including California) has a problem that cannot be solved on the backs of 18 year-olds. (See Figure 6.)
7. **Program completion funds should be treated as one-time funds.** There is no guarantee that the proposed five-year College Completion Program will emerge unscathed from the FY 2010 budget-making process, let alone be made an on-

going feature of the federal higher education funding stream. Vagaries of the federal budget process aside, this program has to be viewed as a large one-time investment in change, not an investment in institutional fiscal stability and viability. The goal must be a change in institutional behaviors and in the policy environment within which these behaviors occur. The Program cannot allow states to use program funds to plug holes in state budgets.

8. **Finally, this program should focus on improving completions through actions that can be implemented by postsecondary education, not actions taken by the public schools.** To be sure, better student preparation is a necessary element of an overall strategy to increase college degree completion. But funds are already available through the American Recovery and Reinvestment Act (stimulus funding) and the "Race to the Top" program that encourage K-12 reform. Program Completion funds should be spent with an explicit expectation that parallel changes will occur in higher education policy and practice. Actions that cross the K-12/postsecondary divide and are led by higher education should not be excluded, however. These might include dual credit arrangements and the development of data systems that span all segments of education and connect to workforce systems.

³ Refer again to Figures 1 and 3.

Figure 6. Even Best Performance with Traditional College-Age Students at Each Stage of the Educational Pipeline Will Leave Gaps in More than 30 States



In order to reach international competitiveness by 2025, the U.S. and 32 states can't close the gap with even best performance with traditional college students. They must rely on the re-entry pipeline - getting older adults back into the education system and on track to attaining college degrees.

The challenge articulated by the President and reflected in the College Completion Fund will demand a vigorous response from community colleges, four-year institutions that have instruction as their primary mission, and open access private institutions. In California, the California Community Colleges and the California State University System acting separately and in concert must bear the brunt of the response.

III. Conditions for Receiving Program Completion Funds

Given the criteria listed above, any state-level entity receiving College Completion funds should be asked to address the following topics as a precondition to the receipt of funds:

- The state's goal for increased levels of degree production—how many, of what types (certificates, associate degrees, baccalaureates), and in what time frame?
- The specifics of the metrics to be used to monitor progress toward goal achievement, including an indication of which subpopulation figures will be reported.
- The strategies to be employed to achieve the sought-after gains—how program funds will be invested to promote change.
- The broad outlines of a financing plan that indicates not only how the funded initiatives will be sustained, but also how any growth of the system required to achieve intended goals might be financed. At minimum this should include, on a sector-by-sector basis, assumptions and plans regarding:
 - Levels of state funding required.
 - Anticipated levels of tuition and the overall amount of net tuition revenue.

- The student financial aid strategies (and required state investments) to be employed to ensure affordability.
- Productivity enhancements and the extent to which per-student expenditures would be reduced if they were implemented.

Most importantly, this broad plan should reflect circumstances after stimulus funds are no longer available, presumably FY 2012 and thereafter.

- Evidence that the state has, or will have within two years, the data systems required to track students through the K-12 and postsecondary education systems and into the workplace. In the absence of such data systems, state funds should be put into escrow until such time as these data system requirements are met.

The requirements listed presume the existence of an entity within the state that can provide real leadership to a critically important endeavor. This should not be an entity that can simply manage one more federal program. The need instead is for an entity that can: 1) develop and build broad consensus around a set of statewide improvement goals, 2) devise and implement strategies for improving degree completion that will require different levels and kinds of contributions from different sectors and that will inevitably result in differentiated allocations of funds to different institutions and sectors, 3) develop a broad financing plan for higher education that can gain acceptance by both the executive and legislative branches of government, 4) ensure that program funds are invested in large-scale change rather than in the “boutique” kinds of solutions that tend to emerge when all actors feel they must get their “fair share” of available resources, and 5) develop and maintain data systems that can yield the kinds of information needed for planning and evaluation.

Many states have entities that can fulfill these requirements. Such states can be legitimate players immediately after the initiation of a program. Other states, California among them, are unlikely to be in a position to meet these criteria in the short term, and thus to be able to engage in a serious implementation effort early on. Such states should not be precluded from participation in the program. Rather, these states should be given planning grants (with technical assistance, if necessary) to ensure that the requisite capacity is in place and the conditions for initial program funding are met in a reasonable period of time. The balance of these states’ allocations should be placed in escrow for future use rather than redistributed to states that are ahead of them in meeting these requirements for funding.

IV. Approaches Open to Any State

The prior sections have suggested a set of criteria to be employed in implementing the Access and Completion Innovation Funding program. These criteria set the bar at a level that is high, even daunting. Indeed, the expectations are sufficiently high that working harder at doing business as usual will not yield the necessary improvements. Therefore the key question is, “What has to be added to the educational mix if there is a chance that degree production can be increased to the levels envisioned in the President’s stated goal?”

There are no answers to this question that come with guarantees. However, there are a number of ideas that are worthy of consideration that are operable at substantial scale. These approaches fall into two categories.

- a. Funding activities designed to address a known, large problem in the education pipeline.
- b. Directly paying for the desired outcomes—in this case increasing the production of degrees and certificates.

Variations on these two general approaches are described below.

A. Addressing Points of Leakage in the Education Pipeline

Within this broad category are numerous interventions that have proven their worth in helping students (and particularly at-risk students) enroll and succeed in college. Unfortunately most have been demonstrated on a small scale and require substantial additional resources to be successful. Absent are proven models that have been applied on a large scale and have been shown not only to be effective, but cost-effective as well. The following are ideas that could lead to large-scale, cost-effective (albeit partial) answers to the overreaching goal of increasing degree production within the limits of available resources. No one of them is a “magic bullet.” In some combination, however, they could hold real promise.

1. Develop a statewide definition of “college ready.”

Colleges send high school students and teachers a very mixed message about the knowledge and skills that students should have acquired before coming to college. This mixed message is particularly evident in the multiplicity of placement examinations used by colleges and universities to assign students with deficiencies to developmental math and English classes. Institutions that use the same admissions exams and employ generally similar cut-off scores are apt to use very different placement exams. In the process they send conflicting messages to incoming students: “you’re ready for college (we let you in), but you’re not ready for college-level work (we’re placing you in remedial level courses).”

Alignment of high-school curricula and college-level expectations and curricula is

central to assurances that students leave high school prepared for the next stage of their academic careers. But, if higher education institutions cannot or will not specify their expectations about the nature and level of knowledge and skills required for successful college participation, K-12 teachers must tailor their work to a poorly defined (and moving) target. An initiative to develop national college-ready standards is currently under way, led by the Council of Chief State School Officers and the National Governors Association. Given that education policy has been so jealously guarded at the state level, the ultimate objective of this initiative may be very difficult to achieve. Rather than wait for a national answer to emerge, states should be urged to set their own expectations. This would serve K -12 students and teachers well because most students attend college within their state of residence.

The goal of having a clear statement of college-ready expectations could be considered achieved when a state can:

- Agree on a common placement exam.
- Agree on common placement levels associated with each score range by postsecondary sectors within the state.
- Use the placement exam as a diagnostic tool to identify areas of weakness rather than simply treating it as “pass/fail.”

This proposal sets a high bar. But until it is reached misalignment will continue and recent high school graduates will still test into remedial courses in large numbers. Florida is an example of a state that has made great strides in curricular alignment although remedial requirements remain high. The effectiveness of aligned courses was recently demonstrated by a Florida Community College System study that linked performance in related high school

math courses with later courses taken in college. Results of the study clearly showed performance gains in college math courses among students who had taken the proper course in high school.⁴

2. Create a system-wide approach to cost-effectively delivering developmental education.

Any successful strategy to greatly increase the number of college graduates will require community colleges to play a significant role. At the moment 60-70% of the students who enroll in community colleges arrive on campus with at least one academic deficiency. A small percentage of students who enroll in developmental education courses successfully complete those courses and an even smaller number actually finish an academic program. Failure at this point is a huge obstacle to achieving the broader goal.

While inability to successfully get students through developmental education is widely recognized as a major problem, there are few instances of systemic assaults on this problem. Rather, most colleges continue to offer developmental education:

- In a scheduled course format. This means that students must take the entire course even though their deficiency may have been limited to only a few topics addressed by the course. This also means that students' acceleration through remediation is difficult to achieve; the focus is on successful course completion rather than successful acquisition of the needed knowledge or skills.

- As cheaply as possible. This typically translates into using untrained adjunct faculty to teach these courses.

This approach has been proven repeatedly to be neither effective nor efficient, but it continues to be the normal way of doing business. In institutions that have focused attention on developmental education, moreover, a common practice is to add a set of wrap-around services such as additional tutoring or supplemental instruction to the basic delivery model. This has frequently led to improved performance, but it also makes the approach more expensive. What is needed is a completely reformed base model, not an ineffective base model with compensatory add-ons.

A new approach to improving the delivery of developmental education should be created with the following criteria in mind:

- It should rest upon fine-grained assessments of deficiencies. The typical student placed into a developmental course knows some of the material, just not all of the material of which mastery is required for successful college-level work. Assessment that allows remediation to be focused on the areas of weakness is a critical foundation for an improved approach.
- It should consist of modularized instructional units. These modules should teach the particular fine-grained areas of knowledge and skills identified by the assessment process. The objective should be to tailor instruction so that each student works on only those areas in which (s)he has been diagnosed as deficient. The objective is to reduce the "cycle time" for remediation.
- It should be designed for statewide application. There is no reason to

⁴ See <http://www.fldoe.org/cc/OSAS/DataTrendsResearch/DT33.pdf>.

develop comprehensive solutions to this problem piecemeal on a campus-by-campus basis.

- It should be contextualized insofar as possible, so that the instructional activity explicitly teaches writing and math in the context of a particular program of interest to the student for example, Nursing.⁵
- It should use technology to a much greater extent than has been typical. This is necessary for a variety of reasons including tailoring delivery to student needs, allowing for acceleration, and achieving the necessary scale and associated productivity gains.
- It should have a “high touch” component, but in the form of coaches and mentors rather than classroom teachers.

There are several efforts underway to craft solutions that generally meet these criteria. Perhaps the most advanced is in Tennessee, where initial results are very promising.

3. **Develop statewide strategies to get students to discrete momentum points.**

Research has demonstrated⁶ that educational attainment is enhanced when

institutions focus their educational activities—and their accountability and student-progression monitoring—on successful student attainment of intermediate attainment milestones such as:

- Completing remediation in at least one area in the first semester of college enrollment.
- Completion of the first college level course in the semester after completing remediation in that same field.
- Accumulation of 12 credit hours.
- Accumulating 20 credit hours in the first calendar year of college enrollment.
- Becoming “transfer-ready.” In many states, this means completing the agreed-upon general education core curriculum. In states (like California) that have not agreed upon a transfer core, this could be defined as completing 30 hours of college-level work, college-level English composition and a college-level math course, and one college-level course in each of the main general education disciplinary “families” (Science, Social Science, and the Humanities).⁷

⁵ A hallmark of the Jobs for the Future “Breaking Through” project is heavily contextualized developmental delivery. Other examples include Washington’s I-Best program and California’s Career Advancement Academies.

⁶ Prince, David and Jenkins, Davis (2005). *Building Pathways to Success for Low-Skill Adult Students: Lessons for Community College Policy and Practice from a Statewide Longitudinal Study*. New York:

Community College Research Center (CCRC), Teachers College, Columbia University.

⁷ The California Community Colleges have defined “Transfer Ready” as completing 56 credit hours of college-level work—essentially the requirement for an associates degree, so not terribly helpful.

Implementing such strategies would require considerable involvement of campus faculty and administrative leadership drawn from all sectors in understanding the importance of these “momentum points,” creating sophisticated longitudinal data systems that can monitor their attainment, and sharing institutional good practices with regard to both instruction and student support services.

4. Design intensive first-year experiences for all students.

Programs for first-time college students that are designed to help them acclimate to college life have been shown to have a demonstrable impact on student success. They may be particularly important for students who enter college with academic deficiencies or from disadvantaged backgrounds. Among the characteristics of such programs are:

- Learning communities, in which students are placed in affinity groups who take paired classes with linked content, and who study together regularly.
- Study-skills or blended first-year classes, which teach regular disciplinary content (e.g. history or psychology) together with exercises and readings on skills that will help students succeed in college such as time management, how to read various kinds of texts, or how to use the library.
- Deliberately designed “early warning” systems which provide all faculty teaching first-year students with tools to detect students who are not doing well quickly and provide student support staff with information about how to reach these students and the nature of the problem.

5. Reengineer student support services.

At a recent conference sponsored by the Lumina Foundation, numerous examples were provided of programs that improved completion rates for community college students, especially working adults. One common feature was the provision of “wrap-around” services to help students deal with institutional bureaucracies and the complexities of coping with college, work and family responsibilities. But such strategies will add costs if they are not designed with cost savings in mind from the outset. Therefore, an important institutional strategy may be to convert most student service staff into student “case managers.” Case managers are generalists who can help students cope with a variety of problems rather than specialists who are equipped to deal with only one issue (and invariably end up referring students to other offices and individuals). The resulting “customer friendly” environment would move the burden of “connecting the dots” in receiving services from the student to the institution.⁸

Reengineering of this kind is fundamentally a campus responsibility. It cannot be accomplished from the state level. The appropriate state role is to support demonstration programs that are capable of being scaled up.

⁸ This “one-stop shopping” is described more fully in Ewell and Wellman’s document entitled *Enhancing Student Success in Education: Summary Report of the NPEC Initiative and National Symposium on Postsecondary Student Success*, and in an AASCU report entitled *Student Success in State Colleges and Universities*.

Demonstration programs of this kind would be most helpful if they:

- Reorganized student service functions to reflect a case manager approach.
- Collected and shared information about how institutions are accomplishing this objective in different ways without falling into the trap of superimposing a favored solution on institutional arrangements.
- Funded two or three quite different demonstration projects at institutions, documenting how and how well they worked, and holding a (possibly mandatory) dissemination conference to share these results.
- Get out of the way. In many states there are mandates regarding how these services should be provided, staffed, and organized. A focused review of all pertinent state policies and procedures should be a priority, with an objective to eliminate those that preclude generalists playing the central role in delivering student services.
- Supported the development of system-wide specialist capacity at the system level. If most student services at the campus level were provided by generalists, there would remain a requirement for more in-depth expertise in various areas. Presuming that most issues can be addressed most of the time by case managers, it would be cost-ineffective for each campus to employ its own stable of experts. A more efficient solution would be to employ these individuals in a central services entity that can provide the “help desk” backup as required.

6. Conduct a campaign to raise student aspirations.

A major impediment to increasing the number of postsecondary degree holders is a lack of motivation on the part of too many individuals to enroll in college or, once enrolled, to complete a credential. Whatever the cause of this disaffection with further education, it is clear that the President’s goal cannot be reached only by educating those who are currently seeking admission. Many more must be persuaded that they want to participate. And a large and growing share of this new student population will be Hispanic or Black—groups that have proven especially hard to recruit and graduate. Encouraging such potential students to participate is a sales job that cannot be accomplished by higher education alone. Employers are the necessary partners in this endeavor. Because pocketbook issues are central to motivating the target audience to enroll, actors who affect hiring and promotion are the key to promoting the importance of increased learning. This message can be sent in many ways:

- By indicating in employment ads that a college degree or certificate is preferred or required.
- By assessing skills as part of the hiring process and referring individuals to skills development opportunities if they are screened out.
- By requiring specific certifications as a condition for promotion.
- By recognizing workplace and skills certificates in the hiring process.

The role at the state level is to organize and lead a campaign that brings employers to the table and elicits their support and follow-through.

7. Assess prior learning.

Many of those adults who must be brought into postsecondary education are working and have been for several years. In the process they are likely to have acquired a range of skills. Most of these skills, to be sure, are vocational, but many will also be of academic value such as applied writing, quantitative skills, and problem solving. In the interests of accelerating postsecondary attainment, it is in everyone's best interests to convert this learning into academic currency—student credit hours. This means:

- Establishing mechanisms for assessing skill acquisition.
- Developing standard equivalencies between particular skill levels specific courses and credit hours.
- Adopting practices like Ohio's "Stackable Certificates" that provide a vehicle for acknowledging the acquisition of skills at multiple points on a career pathway.

All these steps require statewide action. Institution-by-institution action will not result in the kind of transferable credentialing required as the basis for an effective career pathway. Assessment of prior learning is especially important for community colleges that reach many individuals through non-credit instructional activities. If actual learning is aligned with the requirements of an academic program, the means by which it was acquired should be irrelevant. Assessment of skills, if done rigorously and preferably by an independent entity, provides a way to enhance degree production at little added cost, while maintaining quality.

8. Create the necessary data system.

Longitudinal student tracking systems are a key piece of the infrastructure needed

for the effective implementation and evaluation of any of the tactics listed above. Because substantial funding is being provided by the federal government through avenues separate from the College Completion initiative, states should recognize the importance of this capacity, but not create it with funds from this initiative. A corollary is that funds designated for data system development must involve postsecondary and workforce data, not just K-12 data.

B. Funding performance

A different and complementary approach to accomplishing the desired end is paying for results and giving institutions the responsibility for developing the processes by which these ends are achieved. This approach can supplement the more directive actions described in the previous section.

Many options are available for a state to pay for results. Some create incentives for institutional behaviors, while others focus on students. Among the former, the traditional approach has been to set aside resources that are then allocated to institutions if they achieve an identified degree production goal. One way to do this is to establish a fixed pool of resources and distribute it to institutions on the basis of their pro-rata share of any production increase. An alternative is to pay a fixed amount for every degree awarded in excess of the prior year's production. The first approach creates certainty for the state and uncertainty for the institutions because they do not know from year to year what the value of an additional degree will be. The second has the opposite effect, creating certainty for the institutions but uncertainty for the state because it will not know what the bill will be until the end of the year.

A number of states have used both approaches and doing so has several benefits. First, it is unambiguous and the measurement of the base variable (degrees granted) is

straightforward. The signals sent to institutions about what is wanted are clear, as is the basis for determining the transaction costs. Second, it does not dictate how the desired ends are to be achieved, so institutions are free to adopt their own approaches. Third, the formulae can be easily modified to give additional weight to degrees given to targeted populations (for example, those entering with academic deficiencies, etc.) or to degrees in priority fields like the Science, Technology, Engineering and Math disciplines (STEM). Finally, paying for completion creates incentives for other desired behaviors like accepting transfer credits, giving credits for learning acquired in workplace and other non-formal settings, and actively seeking to re-enroll students who left college before completing a program.

But although pay-for-performance schemes are conceptually appealing and have been tried in large numbers, there is little evidence that they have lived up to their promise. Most policy analysts would argue that the failure lies in implementation, not basic design. The size of the rewards have been simply too small to provide enough leverage to engender change.⁹ This is especially true when the majority of state appropriations and all tuition revenue create a countervailing incentive to enroll students, not graduate them.

One answer is to significantly increase the share of state appropriations tied to increasing the number of graduates (say from 2% to 20%). A change of this magnitude would be unlikely to be embraced by institutions because of the level of uncertainty that it would introduce into their budget planning. An alternative is to better align the core funding allocation with the desired goal. Some states are moving in this direction by simply allocating core funding on the basis of

enrollment counts at an early semester census date to counts of course completions (e.g. Ohio, Indiana, and Texas). This does not change the basic structure of enrollment-based funding models, but it shifts their focus. It creates incentives for institutions to pay attention to student success, removes the arbitrariness of a census date so that courses completed any time during the fiscal year through any format get recognized, and creates a vehicle for recognizing credits accumulated by alternative means (e.g. test-out or recognition of prior learning).

The bottom line is that state funding mechanisms need to be aligned with state goals. The incentives and disincentives contained in the resource allocation scheme constitute the most powerful levers available to state-level policymakers. If these levers are misaligned then the other policy tools available like accountability or regulation will count for little. The signals sent through the budget are the ones that get attention. As a result, federal and philanthropic resources should focus on fundamental reform of state resource-allocation mechanisms rather than adding marginal resources. When external funds are no longer available, state budget processes will remain. If they have not been modified to support the degree production goal, external funds will not have lasting impact.

The same logic applies to attempts to alter institutional behavior. Part of the strategy here might focus on students. One approach might be to reduce the opportunity cost of college attendance. Most students, and especially low-income students, commit many hours to work, so time becomes the commodity in short supply. Working enough hours per week to pay for college and contribute to the family's economic viability often leaves too little time to engage in college as intensely as is required for success. Because of this some way must be found to lower the opportunity cost of college attendance. Grant aid is one answer because it provides enough support to

⁹ Most such schemes affect no more than 5% of total allocations and the vast majority are in the 1-2% range.

bring down the number of hours that need to be worked. In many states, the cost of this solution is prohibitive. The alternative is loans. This approach can be effective for students who actually complete a program, but many populations are loan averse and many students who borrow never complete a program. The first group substitutes work for borrowing and puts academic success at risk in the process. The second group accumulates debt without gaining access to higher incomes that let them repay it.

There is a third avenue that is too-little considered. This is funding that allows students to earn and learn simultaneously. Among the possibilities are internships, apprenticeships, cooperative learning experiences, and work study. All of these have the benefit of adding academic value at the same time they add economic value. Devoting one-time resources to serious consideration of how such programs could be crafted to fit into private sector partnership possibilities within a state, while being economically feasible from the perspectives of both state and students, would be a wise investment.

An equally wise investment would be to investigate the feasibility of paying students for success. This would constitute a student-focused equivalent to creating incentives for institutions to graduate students. There are at least two possibilities here. One is direct payment to college award winners with the value of the payment established in a schedule established by the state—for example, an associate degree is worth \$x, a baccalaureate degree is worth \$(x+y), etc. An alternative is loans that are forgiven upon program completion. A third possibility is income tax credits that can be drawn down by award winners with a fixed value to be drawn against.

In sum, with respect to paying for performance:

1. Finance policy and practice are the most important tools available to policymakers.

Aligning the incentives inherent in the funding mechanism with desired outcomes is critical, but is seldom accomplished.

2. The incentives embedded in core resource allocation processes as well as special-purpose funding programs have to be aligned and mutually reinforcing. It is futile to create incentive-based add-on programs if the base funding model rewards the opposite behavior.
3. Incentives applied to students, as well as institutions should be considered.
4. Any external funds—federal or philanthropic—should focus on changing the ongoing system in a positive direction rather than on directly funding add-on components.

In sum, if College Completion funds are focused on finance policy it is suggested that they be invested in:

- Supporting state efforts to develop and build consensus around new finance models that align appropriations, tuition, and student aid policy with one another and that demonstrably aligns the embedded incentives of all of these with the goal of increased degree production.
- Providing incentives to either students or institutions for degree completion with solid assurances that state funds will eventually replace federal funds. One mechanism to help ensure this would be to make access to other federal funds contingent on state continuation of the incentive pool.

V. Applications to California

The previous section catalogued a variety of ways to effectively utilize College Completion Program funds without considering the educational and political contexts of any particular state. This section suggests ways program funds might be most effectively used in California.

A. A Precondition – Organizational Capacity

Regardless of the initiatives selected, each participating state must possess an organizational or political entity that can:

- Establish and build consensus around goals that commit the state to making a specific contribution to achieving the national degree-attainment goal.
- Monitor and report annually on progress being made in achieving this goal.
- Develop strategies for using program funds to further this agenda.
- Provide oversight of how funds are used and create an environment in which the benefits of any innovations developed can be maximized.
- Compile and access the data needed for planning, implementation, and evaluation.

California does not currently have such an entity. The leaders of the three public higher education segments are all capable, but the segments themselves do not constitute the community of solution. An entity that can take a statewide perspective and work across segmental lines is needed.

The California Postsecondary Education Commission (CPEC) is, on paper, the obvious place to house such an endeavor. However, CPEC has repeatedly demonstrated an inability to create and lead initiatives that cross segmental lines and it is not viewed as a leadership organization by the Governor, the

legislature, the business community, or the higher education systems.

Similarly, neither the Governor's office nor legislative staff offices are appropriate homes for this undertaking. The Governor's office does not have the necessary capacity. Perhaps more important, it will probably not have the necessary continuity to see a five-year activity through to its conclusion. Legislative staff offices, in turn, are not equipped to shoulder what is essentially an executive branch set of responsibilities and to manage an on-going set of programmatic activities.

Given that the extent to which existing organizations are poorly positioned or equipped to carry out the necessary functions, what options are open to California? There are at least three possibilities, each of which could provide a venue for doing the necessary planning and capacity building in the first year of the project and handing off the implementation task to a new, longer-lived entity. The first is to create a Blue Ribbon Commission, named by the Governor, and charged with the first three of the responsibilities listed above—goal-setting, accountability system, and selecting strategies for investment. The Commission would also be charged with recommending the form and function of a permanent entity to discharge these functions. This Commission (or members selected from it) could evolve into the Board of Directors for the permanent entity.

A second option is to identify an existing organization in the state with both the credibility and capacity to bring the right people to the table, lead the planning process and create the permanent entity to which implementation would be assigned. One organization that meets these criteria is the National Center for Public Policy in Higher Education (NCPPE). Another is the Business Roundtable. There may well be others. Whichever organization is selected and

agrees to play this role should not be expected to be the permanent entity.

A third option is to create an entirely new non-profit center outside the current higher education governance structure (for example, a Higher Education Policy Council). Such a Center would be charged with both planning and implementation. One way to do this quickly is to fund the Center through the philanthropic community in the short run, with an understanding that it become increasingly state supported over the life of the College Completion Program.

Specification of the options does not help California pick a path to follow, but creating a mechanism that can lead the state's College Completion initiative is key not only to the program, but to the future of the state. Of the options presented, the second has the greatest potential because:

- Whichever organization is chosen to play the leadership role will almost necessarily be headed by an individual who is widely recognized among the education and political leaders of the state providing a nascent enterprise with instant credibility.
- This option minimizes start-up time.

Any of these options will require a meeting of the minds by the Governor and legislative leadership that will probably have to be orchestrated by groups outside government. Again, philanthropic organizations working together may provide part of the answer. There is also work to be done to ensure that the requirements of the federal program, as promulgated, are consistent with the needs of California. It is important that the state's Congressional delegation and the federal executive branch offices that will shape the program be reminded of two important points:

- The requirement that state goals be established and accountability mechanisms put in place should be a

prominent element of program eligibility. An outside impetus like this may be required to get California beyond where it has been up to now.

- Federal action should not dictate which entity should receive funding and manage the initiative within California. Federal regulation of the program should be permissive rather than prescriptive.

B. Activity-Oriented Initiatives

No matter what strategies California ultimately selects in pursuit of the broad goal of substantially increased program completions, the path will be difficult. It is a large, complex state with a long history of adherence to a Master Plan that reinforced lines of demarcation between the segments and established access as the dominant—and almost the only—legitimate goal for the state. It is also a state that promotes the independence of local community college campuses while at the same time entwining them in a web with more constraints on local actions than can be found anywhere else in the country. In this environment, initiatives that make success instead of access the main goal, as well as calls for collective and coordinated action to achieve that goal, will face daunting challenges. California higher education has proven to be highly resistant to change. But change must come. Continuing down the current path will jeopardize the future of the state and constrain the life chances of far too many of its citizens.

Given these realities, the odds are stacked against the immediate success of any strategies which are chosen. Strategies with the greatest chance to make a substantial difference are those that:

- Are designed for system-wide, large-scale implementation. Funds distributed across all institutions to support campus-based initiatives on an “equitable” basis will not get the job done.

- Do not require mandatory participation by institutions. Initial participation should be voluntary, but with multiple inducements (such as regulatory relief) to join the parade.
- Have a clear strategy for broadening participation to include most, if not all, of the eligible institutions.

Within this framework, the following initiatives are suggested for particular consideration in California:

1. **Develop and adopt common placement exams that can be used to establish a clear benchmark for what it means to be college-ready in California.** States like Florida, Georgia, and Massachusetts have common placement examinations and cut scores in their community college systems. But placement assessments as applied within the California's community colleges are remarkably diverse. This extreme variation negates any collective influence the community colleges can exert on public school performance. Working jointly with the California State University system, the community colleges could have an enormous impact on high school preparation. A starting point should be the assessments utilized by the CSU System. They have been carefully constructed, integrated with secondary assessments and have substantial diagnostic capabilities. Since so many of the students who eventually attend CSU start in community colleges, there is even a greater reason to use the same instruments to determine college readiness/placement in remedial courses. The burden should be placed on those who would argue against using a common placement exam.

Coming to agreement on this matter will undoubtedly require much negotiation and the issues raised will be more political

than technical. Nevertheless, it is a process worth engaging. Voluntary adoption of common standards by consortia of community colleges, particularly those with a strong transfer relationship with a CSU campus, would be a good place to start.

Program funds could be used to fund technical assistance work in validating instruments and ensuring their diagnostic utility. They could also be used to reward those institutions that voluntarily agree to use a common instrument. Voluntary adoption would save the necessity for legislative action until enough institutions have become proponents to ensure the success of the eventually necessary legislative action.

2. **Develop a system-wide approach to delivering developmental instruction.** This is an area that particularly lends itself to course reengineering that can yield improved results at reduced costs. A combination of modularized instruction, use of technology, strategies that use faculty and staff resources in different ways (such as coaches and mentors), and self-paced learning should be among the key design criteria. Similar strategies are being played out in other parts of the country, so there are well-conceived models to review and build upon. And again, participating institutions should be encouraged to engage on a voluntary basis.

It should be noted that the Basic Skills Initiative (BSI) now being initiated in the California Community College System has a useful and symbiotic relationship to a statewide developmental education activity. It will benefit from the development of student assessments, content modules, and accountability metrics while contributing faculty development and other forms of

infrastructure support to any broader program.

3. **Engage employers in promoting the importance of further education.**

Employers have a particular role to play in encouraging individuals to acquire higher level skills. They alone can create a “market pull” on potential employees. Such a campaign could take several forms:

- A media-based campaign conducted as a joint public-private undertaking.
- An initiative that would ask or require public sector employers (state and local governments, school districts) to ensure that all employees have at least a high school diploma or a work readiness certification.
- An all-out effort to encourage employers to require work readiness certifications as a condition of employment.

These are tactics that can encourage students who otherwise would eschew further education to raise their educational aspirations. Increasing the numbers of Californians—especially adults—who seek postsecondary opportunity will be critical to the state’s ability to achieve its fair share of the national attainment goal. This is a strategy that is particularly well suited to the kinds of centralized action that could be effectively supported with program funds.

4. **Support the acquisition and acceptance of workplace readiness certifications.**

Many in California’s workforce have limited basic workplace skills. There is every reason to develop a system for teaching these skills (probably in conjunction with developmental education instruction), assessing these skills using nationally recognized instruments, and awarding nationally recognized certifications for successful

demonstration of competence. The assessment instruments are already available. What is necessary is an assessment system, aligned instructional programs, and employer utilization of certificates in the hiring and promotion process. This is also an endeavor well suited to system-wide rather than campus-level implementation.

5. **Develop capacity for assessing and giving credit for prior learning.**

Many of the individuals who will become engaged in the postsecondary education system are adults who have been in the workforce for some time. A significant proportion of this group will be individuals who have earned some college credit, but dropped out before completing a degree or certificate program. For selected occupations—for example, those with large numbers of incumbent workers (preferably in large firms at the outset) and where certification of learning matters—an initiative could be put in place that:

- Identifies employer-recognized certifications associated with the occupation.
- Builds employer interest in using these certifications in the hiring and promotion process.
- Translates the results of skills assessments into credit hours applicable to associate degrees in specific fields.

Such a process could usefully determine the extent to which current workplace readiness certifications at the advanced levels (gold and the new platinum) could substitute for academic credits in general education. A variation on this idea is a central bank of exams that would allow students to challenge college-level courses. A system of this sort, keyed to its common course numbering system, is

currently in place in Florida. A certification and credit translation clearinghouse might also increase degree completion and is best implemented centrally rather than at the district level

6. **Create a central “help desk” to support student service activities.** As noted earlier, there are real advantages to staffing student service offices with generalist “case managers.” To support these generalists, who could be cross-trained to address most of the problems that arise most of the time, specialists will also be needed in a variety of areas including:

- Financial aid.
- Career counseling and placement.
- Eligibility for social service benefits.
- Special needs tutoring.

This type of service support can be developed incrementally, starting with a few services supporting a few institutions, and expanding to serve more institutions in more areas as demand warrants. Call centers utilized by some proprietary institutions are good models for this kind of centralized advisement and support. The University of Phoenix and Ashford University do this very well from one or more centralized locations.

C. Funding Performance

Changing well-entrenched funding mechanisms to better align them with the College Completion program goal will be a slow, incremental process in California. There are, however, some useful steps that could be taken immediately:

1. **Adopt a Completions-Based Funding Model.** This is the most significant step that could be taken to align financing practice with goals. A set of institutions (calling themselves Accelerated Learning Colleges (ALC)) has already indicated

strong interest in moving toward a completely outcome-based funding model (resources provided on a per-degree-granted basis) in exchange for regulatory relief in some key areas. If implemented, this would be the most complete pay-per-performance program in the country. Since much of the groundwork for this particular initiative has already been completed, implementation could be started quickly. Because additional institutions are expressing interest, moreover, College Completion funds could be used to expand the program with additional volunteers, then broaden the base of implementers by providing direct incentives to the more reluctant participants.

2. **Fund achievement of momentum points.** For institutions that do not adopt the ALC approach, the state could:

- Leave the institutions’ enrollment-based, base allocation in place.
- Create an incentive pool using funds from selected categorical programs, freeing institutions from the associated regulatory requirements in the process.
- Allocate the accumulated pool of resources based on the extent to which institutions increase their performance on the achievement of selected momentum points as discussed previously.

Such approaches typically work best in a continuous improvement mode, under which institutions seek to improve upon their own past performance rather than meet a standard or surpass other institutions. This strategy, however, cannot be implemented in the absence of a sophisticated longitudinal student data system. Until this core piece of infrastructure—a data system that cuts across the segments—is put into place,

the options available to California are limited.

Under both of these alternatives, College Completion program funds should not be used to directly fund the initiative but should be invested instead on technical assistance. This will help ensure that major mistakes are avoided insofar as is possible and that the trials succeed or fail on their merits. The objective is to more effectively utilize resources that are already available, not to do more with more.

If the above attempts to improve show promise, additional improvements can follow. Given the deeply entrenched nature of the current resource allocation scheme in California, it makes little sense to try to change it wholesale. Instead, an approach should be crafted with wide-scale implementation in mind, but should start with volunteers and expanding the circle of converts over time.

Any of these proposals will require statutory change in California. This will be true even for demonstration activities. This is never an easy matter, especially in circumstances when there is likely to be opposition. While the argument has been made throughout this paper that implementation at scale is important, changing funding mechanisms at scale may prove infeasible. Because finance policy is such an important tool, however, pilot implementation is better than no implementation at all. So adopting incentive funding for even a small group of institutions is worth trying.

One avenue to incentive funding that does not require legislative approval is paying students for achieving particular educational milestones such as momentum points or degree completion. Experiments with performance-based scholarships with funding from the Bill & Melinda Gates Foundation are scheduled to begin soon. And other models could be tried. Philanthropic funds will never be sufficient to sustain a program, but they

can underwrite some well-designed experiments. Federal Completion Program funds could be utilized in much the same ways.

Conclusion

The advent of the College Access and Completion Innovation Program and its associated funding holds great promise. But this promise will be realized only if the criteria governing state use of program funds are wisely constructed and if they leverage state resources already available to promote change. States should apply funds recognizing that they will be available only for a limited time. As a result they should be used to create capacity and to change current ways of doing business with levels of funding already in place. And because major increases in degree production are required, the emphasis from the beginning, at both the state and local levels, should be on initiatives that hold promise for large scale implementation and that are crafted from the outset with that objective in mind.