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Recent Statewide Reforms in Higher Education Financing and Accountability: Emerging Lessons from the States

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This paper examines reforms to historic approaches of paying for higher education in the states. Summaries of relevant recent reforms and financing approaches are included although this paper does not offer a complete history of higher education financing or every reform in every state. Rather the aim of the paper is to ascertain if there are any relevant lessons from other states that California can apply to its current higher education financing efforts.

Historically, financing higher education has been left primarily to the states. Although the federal government provides substantial funding to students through student aid programs, the federal government is not directly involved in how states organize or finance their higher education systems. Because states have substantial autonomy in higher education governance and finance there is wide variation in the states in both the level of support and the structure of higher education systems. However, despite their diversity states have faced similar problems recently because of declining state revenues and a need for greater higher education output to fuel the economies of the future. Recent statewide approaches to reforming both financing and performance in higher education are outlined in this paper with an eye to finding solutions to common problems.

Performance or Outcomes-based Budgeting

The most prevalent budget “reform” being tried in the majority of US states is a transition to some type of performance or outcomes based budgeting—a budget process through which performance information is, in some way, incorporated into resource allocation decisions. Higher education has come late to budgeting based on performance, although it is being used in other state funded activities in a number of states. Almost one-half of respondents to a recent survey of members of the National Association of State Budget Officers (NASBO) indicated that their state uses performance budgeting. However, the NASBO analysis concluded, “despite widespread interest and growing use of performance budgeting practices, the process of actually tying performance information to funding decisions in an effective, meaningful, and practical manner continues to be a major challenge for all levels of government.”

Used for higher education funding in just a few states prior to 2000, by 2016 25 states were using performance to some degree in their postsecondary funding, while another 13 were actively studying it or beginning to phase it in. Promoted by both the Gates and Lumina foundations as part of their national postsecondary reform agendas, performance budgets are designed to increase postsecondary productivity by shifting institutional incentives away from revenues based exclusively on student credit hours to more nuanced measures of results including student retention, degree progression, and completion.

In states with performance funding, state funding allocations follow formulas or weights that are tied to measures of institutional performance against state goals. Typical outcomes include improvements in year-to-year retention, developmental education success, student transfers, graduation rates, and job placements. Several states also allow institution or mission-specific measures such as levels of contract and grant funding for sponsored research. Most performance funding levels are supplements to the “base” funding, and are often provided in the form of incentives or “hold backs” to earn back funding. Nevertheless, both Tennessee and Ohio are using performance and outcomes-measures as the basis for the entire state budget allocation to public institutions.

Martha Snyder and Brian Fox of HCM Strategists[i] have conducted a number of studies of outcomes based budgeting and the characteristics of different types of funding systems. They have identified the following characteristics of systems they find to be most effective:

1) They are based on clear state goals for completion or attainment, which are the basis for funding formulas.
2) They are stable, and endure over several years.
3) They include “base” as well as “bonus” funding.
4) They include both two-year and four-year public institutions.
5) The funding formulae differentiate between sectors using weights or other criteria.
6) Access and attainment for underrepresented students receive priorities.

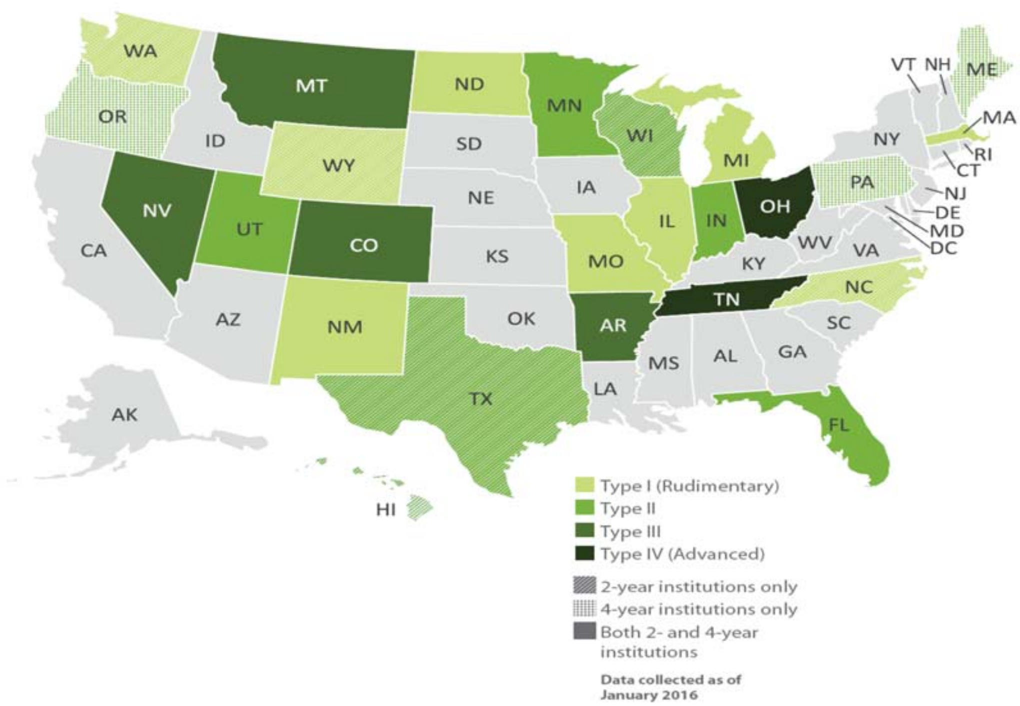
Snyder and Fox have developed a typology to characterize different types of outcomes budgets now in place around the country, ranging from Type I to Type IV, with Type I being rudimentary in terms of outcomes and funding levels, and Type IV being the most significant. According to their analysis only two states—Ohio and Tennessee—are classified as Type IV or most advanced. A map of states showing where they are in outcomes funding, and the levels of funding associated with outcomes, are shown in Figure 2 below.

Figure 1: Typology of State Outcomes/Performance Budgeting

Typical Characteristics *Note: Some states may meet most but not all criteria. States that do not meet all criteria for a particular type are assigned a lower type*	
Type I	• State may have completion/attainment goals and related priorities • Model reliant on new funding • Low level of funding (under 5%) based on statewide analysis • Some or all institutions in one sector included • No differentiation in metrics and weights by sector • Degree/credential completion not included • Outcomes for underrepresented students not prioritized • Target/recapture approach • May not yet have been sustained for two or more consecutive years

Type II	Has the above characteristics and in addition: • Recurring dollars/base funding of at least portion of funding source • Degree/credential included
Type III	Has the characteristics of Type II and in addition • Moderate level of funding (5-25%) based on statewide analysis • Outcomes for underrepresented students prioritized
Type IV	Has the characteristics of Type III and in addition: • More than 25% of funding based on statewide analysis • Formula-driven • Sustained for two or more consecutive years

Figure 2: States Implementing Outcomes-Based Funding, by Type and Sector

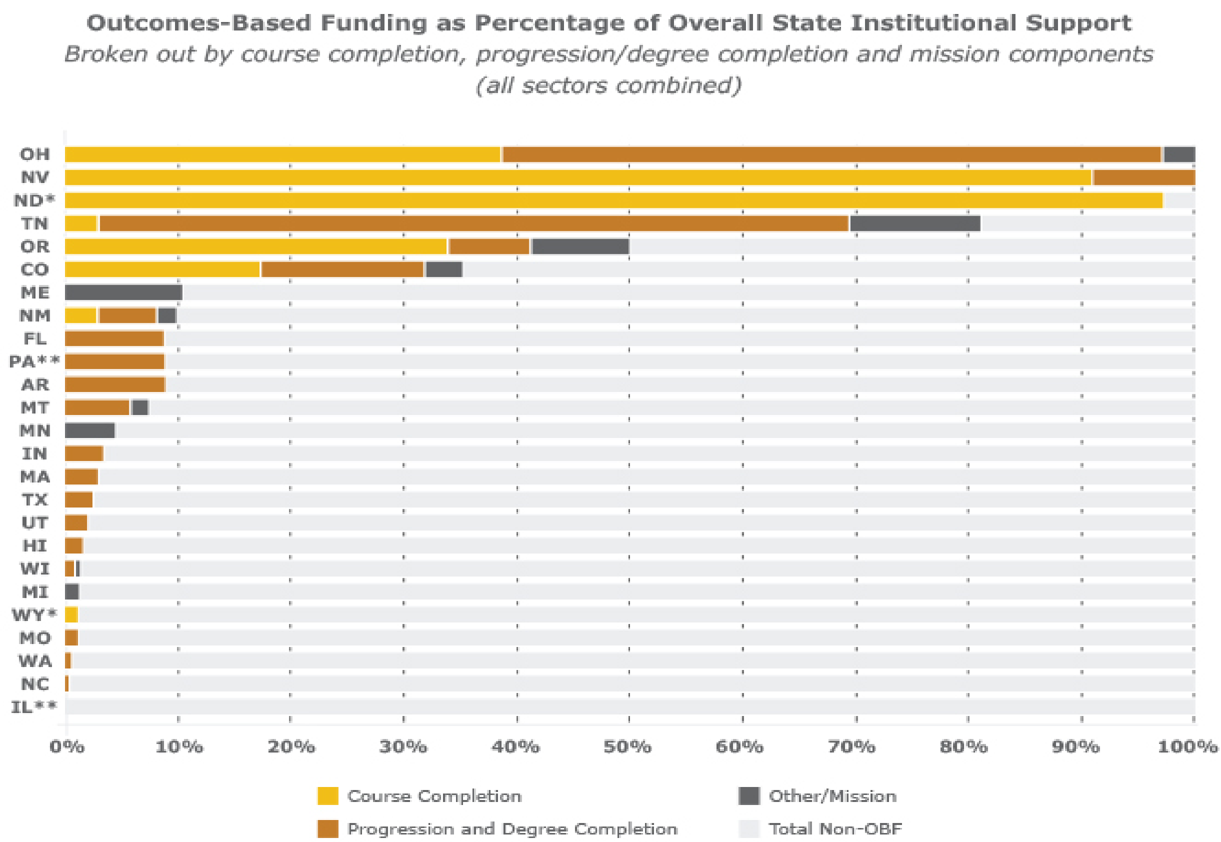


Source: Snyder and Fox, HCM Strategists, February 2016, used with permission.

Studies of the effect of performance budgeting on student outcomes show mixed results. Analyses of the Ohio and Washington systems found some evidence of improved student retention and certificate/degree completion in the two-year sector. Other studies have found similar or even greater gains in institutions without performance or outcomes budgeting.

Analysts are divided as to the reason for the tepid results. Some believe it is because of the relatively small funding levels that are tied to performance. They have also found that the funding systems are too new and unstable to have had long-lasting effects. Most states have been cutting changes in budget systems until there is more “new” money for it. There is also concern that funding on results such as degree completion will lead institutions to reduce standards for degree attainment. Moreover, there is speculation that outcomes-based funding has created incentives for institutions to turn away from at-risk student populations by increasing their admissions requirements to focus on students more likely to obtain degrees. A 2016 study by Robert Kelchen and Luke Stedrak[ii] examined the consequences of performance-based budgeting on institutional revenue and spending practices. They find some indication that institutions with performance-based budgeting have seen declines in revenues from Pell grants, presumably related to a shift toward more selective admissions standards.

Figure 3: Outcomes-Based Funding as a Percentage of Overall State Institutional Support



Source: Snyder and Fox, 2016.

Kevin Dougherty and Vikash Reddy[iii] suggest that the biggest impact of performance-based approaches has not been in student attainment, but in greater awareness by institutions of state priorities, more attention to student retention and graduation, better use of data about performance, and improvements in academic and student support services.

Another factor limiting the impact of outcomes-funding systems may be that while they shape the distribution of funds from the state to the institutions, they do not determine the revenues that are available for distribution, and are not expenditure control systems within the institutions. There are no guarantees for higher education revenue even if performance improves. Incentive funding to recognize performance is increasingly common, so there is ‘new money’ within institutions for experimentation and change to increase student success. Yet at the end of the day, conventional measures such as enrollments, class size, faculty workload, and schedules determine internal institutional allocations even in outcomes-based states.

Other Finance Reform Efforts

Beyond performance-based budgeting, a number of states have looked at ways to improve higher education finance, stabilize revenues, forestall tuition increases, improve campus-level flexibility, and strengthen accountability and transparency. Several have sponsored special study commissions in search of better long-range approaches to higher education finance (e.g., Massachusetts, Maryland, Ohio, South Carolina, and Illinois). Colorado commissioned an independent assessment by the National Center for Higher Education Management Systems (NCHEMS) of its higher education funding system. Oregon experimented with a state Education Investment Board. Several states (New York, Oregon, Texas, and Wisconsin) loosened regulatory controls over use of tuition funds and levels, giving institutions greater authority over tuition levels and also allowing them to retain tuition revenues at the campus rather than using them as offsets to state funds. Furthermore, several big state systems (Maryland, Massachusetts, Ohio, and the State University of New York) instituted new shared services initiatives to increase efficiencies and reduce costs.

- **Using Higher Education Finance Policy to Boost Attainment**. A recent University of Pennsylvania study examined how five states were using finance policy to drive goals for higher attainment (Finney, Perna, and Callan, 2014). The conclusion from their analysis of policy in Georgia, Illinois, Maryland, Texas, and Washington: “At the time of our study, the de facto finance policy in most states was taking it one year at a time, resulting in unstable funding for higher education and unpredictable tuition levels for students and families.”

  Among these states, only Maryland had developed a framework to connect state appropriations, tuition, and financial aid, based on a plan to increase funding for Maryland’s higher education sector to levels comparable to funding in comparison states. As part of their plan, Maryland recommended the establishment of a state level higher education trust fund built with supplemental revenues. The trust fund was to serve as a cushion for higher education funding to insulate the institutions from budget cuts and subsequent tuition increases in times of economic downturns. The concept was never implemented, however, as the Great Recession hit about the same time that they hoped to set up the state trust fund.

- **Statewide Goals, Decentralized Governance and Tuition Authority**. Oregon experimented with a strategic approach to education finance by decentralizing institutional governance and tuition authority while establishing a statewide Oregon Education Investment Board charged with the responsibility to recommend funding goals and mechanisms to meet Oregon’s educational attainment goals. As part of the decentralization of governance, Oregon also loosened regulatory controls on use of tuition revenues in order to give institutions greater authority over the tuition levels and use of the resources. Prior to that time, Oregon prevented institutions from using tuition revenues to replace state general funds. The Investment Board suffered from leadership problems from the onset, and was disbanded when Governor John Kitzhaber left office.

- **Developmental Education Reform and Impact on Cost per Degree**. Although not exactly a type of “budget” or finance reform, a number of states and institutions are promoting improvements in developmental education in order to get more students to successful degree outcomes. A new study about the cost effectiveness of “corequisite” developmental education in Tennessee’s community colleges is an object lesson in why such educational reform must also be connected to budget reform in order to take hold. Under the corequisite model, academically unprepared students take entry-level college courses simultaneously with remedial academic support. The corequisite model differs from the conventional approach in which remediation is provided as a prerequisite to college-level coursework.

  Conducted by Columbia University’s Community College Research Center, the study documents that corequisite remediation is more expensive per student than the prerequisite model. It also leads to higher costs because it increases student enrollments in credit bearing courses. Regardless, even with those cost increases, the study found that the additional investment pays off in substantial reductions in the cost to produce the degree. Therefore, there are efficiency and productivity gains both for students and for the institution. Yet even in Tennessee— one of two states with 100% outcomes-based funding—the additional costs are not captured through increased funding via performance bonuses to the institution.

Statewide Accountability Systems
Although not specifically part of budget or finance reform, improved statewide accountability systems are another major feature of emerging best practice for higher education. Next-generation accountability systems are a product of growing public and policymakers’ demands for greater transparency and accountability as well as significant parallel investments by large foundations in advocacy organizations and policy tools to address those demands.

Over the past decade, states, systems, and individual public colleges and universities have made significant progress in collecting, aggregating, and reporting on student progress toward certificates and degrees and institutional efficiency. In the best cases, states, systems, institutions, and programs are using that information to guide higher education policy decisions to strengthen student success strategies, in some cases through structured performance-based funding mechanisms. However, many of the systems are still overly complex and opaque, and are better at supporting deep analysis rather than putting information into context for decision making.

Performance and Efficiency Metrics
In the aftermath of the Great Recession, the National Governors Association (NGA) collaborated with Complete College America (CCA) in an effort to establish a core set of measures on college completion. These are now reflected in the accountability reporting systems of the 33 states that have formally joined the CCA Alliance. This effort, funded by the

Bill & Melinda Gates Foundation and the Lumina Foundation for Education, has spurred further refinement in a number of states.

During this same period, a number of states and public higher education systems have developed their own, detailed annual reporting methods. These include the University of California and the California State University, whose former Chancellor served in an advisory capacity on the NGA-CCA effort, though California has not been a formal member of the CCA Alliance (California's Central Valley Higher Education Consortium has been active in some CCA policy efforts).

While individual state, system, and institutional performance metrics vary widely in their specific dimensions and level of detail, most cover a relatively discrete set of data points encompassed in the NGA-CCA Common Completion Metrics (see Figure 4). In this framework, "progress metrics" reflect stages of a student's college path toward successful course completion, credit accumulation, and persistence. "Outcome metrics" reflect the degree of institutional and system success in meeting completion goals, ranging from transfer rates between two-year and four-year institutions to certificates and degrees awarded annually.

"Efficiency and effectiveness metrics" cover everything from meeting workforce needs to evaluating the quality of student learning and gauging return on investment. These and other state- and institution-specific categories are broader in scope, and, in many ways, are the most challenging to accurately measure and report.

Figure 4: NGA-CCA Common Completion Metrics

Progress Metrics

- Enrollment and success in remedial education programs
- Success in first-year college English and mathematics courses
- Credit accumulation
- Retention rates
- Course completion

Outcome Metrics

- Degrees awarded (annual)
- Graduation rates
- Transfer rates
- Time and credits toward degree

Efficiency and Effectiveness Metrics

- Meeting workforce needs
- Student output relative to input
- Return on investment
- Quality/student learning

Reporting Tools
Most states and systems continue to use static print or electronic pdf annual reports to report on performance (such as is the case for segmental level data in California, See Figure 5, below: "Recent Accountability Reporting in California."). Others have begun to move to more dynamic "dashboards" that are more user-friendly and capable of being modified for use in policy or decision-making deliberations, or more broadly for tailoring communications to a variety of public stakeholders.

- **University of Texas System**. The University of Texas System Dashboard is an easily navigable, state-of-the-art graphic database that provides system-wide and institution-specific data on affordability, student success, post-graduation earnings, research, healthcare, and state economic impact. Each data set opens with a sharp and clearly understandable infographic. Users can drill down through successive layers of data and information while moving from a system-wide, long-term lens to institution-specific and more time-delimited perspective, concluding with individual spreadsheets on the source data. Additional contextual information tabs clarify what each metric shows, why it is important, what the methodology and sources are for the metric, and provides links to related data and information including issue briefs on selected topics such as tuition and revenue policies. Individual reports can be customized and downloaded to iPad or Android tablet devices through use of a third-party app.

- **University of Wisconsin System**. The University of Wisconsin System Accountability Dashboard includes performance measures reflecting the System's strategic priorities or data that are required by state legislation on access, progress and completion, cost and efficiency, the undergraduate experience, faculty and staff, and economic development. Additional information is provided on individual institutions and the system as a whole.

State-level efforts in California
Although the national research literature still classifies California as a laggard in outcomes and performance based systems, the label is not entirely accurate. In the Community College sector, student success initiatives have led to significant improvements in consensus about student success, accompanied by goals and indicators to document performance. These have resulted in increases in funding specifically targeted to assessments and accountability, and to strengthened leadership role in the Community College Chancellor's office.

There is also a recent history of attempts to strengthen state policy capacity and to improve shared accountability between the state and the institutions for higher education performance. Legislation to re-establish a statewide planning and coordinating function has been passed (over some objections from both the University of California and the California State University),

Figure 5: System-level Accountability Reporting in California

- The **University of California** uploads to its website an Annual Accountability Report, the 2015 edition of which is a 245-page, 14-chapter compendium of detailed analyses ranging from undergraduate admissions and enrollment, affordability, and student success metrics to issues of diversity, faculty and staff productivity, and teaching and learning data. Its 13-page executive summary, while concise and informative, is similarly static.

- The most recent 32-page 2013 progress report on **California State University's** "Access to Excellence" plan, while framed around important goals ranging from reducing achievement gaps to improving public accountability for learning results, has very limited capacity for customization or drilling down on a particular topic in the context of a policy discussion.

- Between 2007 and 2012, the **California Community Colleges** produced an annual accountability report to the Legislature, pursuant to AB 1417 of 2004. The 845-page 2012 "Focus on Results" report included 24 pages of system-wide data on student progress and achievement, pre-collegiate improvement, and participation rates by age, gender, and ethnicity, as well as detailed college-level indicators.

- The former **California Postsecondary Education Commission** (CPEC) collected and reported on a variety of data across the four-year systems, including information on enrollments, transfer rates, and degrees awarded.

but subsequently vetoed by Governor Brown. Plans for an integrated P-20 student data system have come to naught, in part because of concern about costs but also because of skepticism about how any data would be used. Governor Brown and the Department of Finance have successfully built some pay-for-performance requirements into budget agreements with the University of California and with the California State University, notably about expenditure reporting, for increases in enrollments and transfers of California residents, and for pension reform. They likewise attempted to build requirements for student progress indicators and efficiency measures into the state budget; these were resisted by the institutions and subsequently removed from the budget bill by the legislature.

So despite some progress, it is safe to say that there is still not consensus among institutional, executive and legislative leaders about the possible value of strengthened statewide accountability or performance reporting, nor for the concept that such should be built into funding agreements.

Recent National and State Commissions on Reforming Higher Education Financing

Between 1993 and 2006 there were three National Commissions on higher education, focused largely on the growing cost of college: The Spellings Commission in 2006, The National Commission on the Cost of Higher Education in 1998, and The National Commission on Responsibilities for Financing Postsecondary Education in 1993. The recommendations of all three commissions focused on cost containment, improving access to higher education and increasing transparency and accountability. The 1993 commission additionally had detailed recommendations for the federal role in higher education including improving student aid with limited recommendations about state and institutional actions. The other two commissions emphasized shared responsibility between federal, state and institutional partners in making sure higher education is affordable and accessible.

Two more recent national efforts include the American Academy of Arts and Sciences "Lincoln Project," and the National Commission on Financing 21st Century Higher Education based at the University of Virginia Miller Center. The Lincoln Project has focused exclusively on funding of public research universities. They commissioned several background pieces on funding trends affecting public research universities, and called for a new compact to return to a sustainable financing model for the future. Their recommendations include a call for a renewed state investment in higher education, accompanied with stronger attention to cost efficiencies and to diversifying revenues; more public-private partnerships for funding research; and more attention to student access and completion. The Miller Center project began its work in 2014, and is still underway. It has produced a number of background papers on aspects of higher education finance, including a recent report by Bridget Terry Long suggesting a shift in state subsidies from direct support to institutions to a voucher-based distribution system.

- *California State-level Commissions*[iv]*:* In the late 1990s two major reports on higher education were published, one from a Citizens Commission and the other from the Fiscal Resources Task Force. These two bodies had similar recommendations for higher education including: improving access, stabilizing state funding and smoothing revenue volatility, ensuring that tuition increases are moderate and predictable, providing adequate state aid and strengthening statewide coordination and links with K12. The Citizens Commission additionally advocated for a financing framework that would reward institutional efficiency. The Task Force had additional recommendations on fostering innovation, exploring public-private partnerships and working with the business community to define educational requirements of the workforce.

Relevant Lessons for the Future

California should continue to monitor the advances happening in other states as we pursue changes to our fiscal policies. While there is a clear trend for increasing accountability and transparency that California would do well to employ other reforms such as performance-based budgeting have had less certain results. Considering the need in California to provide access to higher education to many students from disadvantaged backgrounds, the indication that performance-based budgeting might provide perverse incentives for institutions to decline admission to low performing students suggests that this reform should be approached with caution.

Some of the other advances in the states, such as controlling costs through shared services or advancing the way remedial education is designed and delivered have shown great promise. Additionally, implementing better and more consistent reporting and accountability tools, such as through a dashboard model, appear to be a good mechanism to help policy makers and the public keep track of the implementation and effectiveness of policy reforms. However, care must be taken that an effort to provide more data and transparency does not lead to a “data dump” in which information is released but in a format that does not allow for useful policy analysis or institutional accountability.

The National and Statewide Commissions on higher education show a consensus regarding the problem of rising costs and unstable budgets in the states. Although the themes of increasing access, maintaining affordability and improving transparency run throughout statewide and national efforts it is unlikely that there will be a one size fits all approach that will work for every state. Rather California should continue to analyze reforms in other states to ascertain whether they would likely be successful given California’s educational environment. In addition, California should not rely solely on reforms that have been tried in other states but also take the lead in crafting innovative approaches that help address its unique educational needs and economic environment.

Sources Consulted

American Academy of Arts and Sciences. *Recommitting to Lincoln's Vision: An Educational Compact for the 21st Century*. Washington, D.C.: American Academy of Arts and Sciences, 2016. Available at: https://www.amacad.org/multimedia/pdfs/publications/researchpapersmonographs/PublicResearchUniv_Recommendations.pdf

Bautsch, Brenda. "Higher Education Accountability Briefing Document Prepared for the California Legislature," National Conference of State Legislatures, 2012. Available at http://www.ncsl.org/research/education/higher-education-accountability.aspx

Belfield, Clive, Davis Jenkins, and Hana Lahr. "Cost Effective? Early Findings from Tennessee." Teachers College, Columbia University, Community College Research Center Research Brief Number 62, April 2016. Available at http://ccrc.tc.columbia.edu/publications/corequisite-remediation-cost-effective-findings-tennessee.html

California Citizens Commission on Higher Education. "Toward a State of Learning: California Higher Education for the Twenty-First Century." Los Angeles, CA: Center for Governmental Studies, 1999. Available at: http://www.ucop.edu/acadinit/mastplan/ccche/ccchefinalreport.pdf

Complete College America. Issue Briefs, How Tos, and Other Resources on Performance-Based Budgeting. Available at: http://completecollege.org/the-game-changers/#clickBoxBlue

Complete College America. "The Game Changers: Are states implementing the best reforms to get more college graduates?" October 2013. Available at: http://completecollege.org/pdfs/CCA%20Nat%20Report%20Oct18-FINAL-singles.pdf

Dougherty, Kevin, and Vikash Reddy. "The Impacts of State Performance Funding Systems on Higher Education Institutions: Research Literature Review and Policy Recommendations." CCRC Working Paper No 37, Community College Research Center, Teachers College, Columbia University, 2011.

Finney, Joni, Laura Perna, and Patrick Callan. "Renewing the Promise: State Policies to Improve Higher Education Performance." University of Pennsylvania, Institute for Research on Higher Education, 2014.

Fiscal Resources Task Force. "California at the Crossroads: Investing in Higher Education for California's Future." California Education Roundtable, 1998. Available at: http://www.ucop.edu/acadinit/mastplan/crossroads/crossroads.pdf

Hillman, Nicholas, David Tandberg, and Alisha Fryar. "Evaluating the Impacts of 'New' Performance Funding in Higher Education," *Educational Evaluation and Policy Analysis* 37, no. 4 (2015).

Johnson, Nate, and Takeshi Yanagiura, “Early Results of Outcomes-Based Funding in Tennessee.” Lumina Issue Papers, March 2016. Available at: https://www.luminafoundation.org/resources/early-results-of-outcomes-based-funding-in-tennessee

Jones, Dennis. “Outcomes-Based Funding: The Wave of Implementation,” prepared for Complete College America. Available at: http://completecollege.org/pdfs/Outcomes-Based-Funding-Report-Final.pdf

Kelchen, Robert, and Luke Stedrak. “Does Performance-Based Funding Affect Colleges’ Financial Priorities?” *Journal of Education Finance* 41, no. 3, 2016: 302-321.

Miller, Trey. “Higher Education Outcomes-Based Funding Models and Academic Quality,” RAND Corporation, March 2016.

The National Commission on Financing 21st Century Higher Education, A Project of the University of Virginia’s Miller Center. Materials available at: http://millercenter.org/policy/commissions/higher-ed

Reindl, Travis, and Ryan Reyna. “From Information to Action: Revamping Higher Education Accountability Systems,” National Governors Association. Available at: http://www.nga.org/cms/home/nga-center-for-best-practices/center-publications/page-edu-publications/col2-content/main-content-list/from-information-to-action-revam.html

Snyder, Martha and Brian Fox. “Driving Better Outcomes: Fiscal Year 2016 State Status and Typology Update,” HCM Strategists. Available at: http://hcmstrategists.com/analysis/driving-better-outcomes-fiscal-year-2016-state-status-typology-update/

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[i] Martha Snyder and Brian Fox, “Driving Better Outcomes: Fiscal Year 2016 State Status and Typology Update,” HCM Strategists.

[ii] Robert Kelchen and Luke Stedrak, “Does Performance-Based Funding Affect Colleges’ Financial Priorities?” *Journal of Education Finance* 41, no. 3, (2016): 302-321.

[iii] Kevin Dougherty and Vikash Reddy, “The Impacts of State Performance Funding Systems on Higher Education Institutions: Research Literature Review and Policy Recommendations.” CCRC Working Paper No 37, Community College Research Center, Teachers College, Columbia University, December 2011.

[iv] California Citizens Commission on Higher Education, “Toward a State of Learning: California Higher Education for the Twenty-First Century,” (Los Angeles, CA, Center for Governmental Studies, 1999); Fiscal Resources Task Force, “California at the Crossroads: Investing in Higher Education for California’s Future,” California Education Roundtable, 1998.