



The 2016-17 Budget: Assessing the Governor's Zero-Textbook-Cost Proposal

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Summary

Governor Proposes \$5 Million (One Time) for Creating “Zero-Textbook-Cost Degrees” at the California Community Colleges (CCC). Zero-textbook-cost degrees allow students to complete a degree entirely by taking courses that use only free instructional materials, called open educational resources (OER). Under the Governor’s proposal, community colleges would compete for grants up to \$500,000 each to offer a zero-textbook-cost associate degree, certificate, or credential program. The CCC Chancellor’s Office could use up to 5 percent for program administration and technical assistance.

Zero-Textbook-Cost Degrees at CCC a Reasonable Next Step. The state already has funded efforts to select, compile, and make available free, open textbooks for 50 high-enrollment courses that are common to the three public higher education segments. In addition, the state has funded an incentive grant program to encourage faculty to adopt these textbooks and other OER for individual courses. We believe developing OER degree pathways at the community colleges is a reasonable next step. In designing an OER degree initiative, we encourage the Legislature to draw on lessons learned from other states. Most notably, earlier efforts have found that intensive professional development and technical assistance are essential both to facilitate short-term success (such as creating an initial OER degree) and help campuses build internal capacity to continue expanding OER use long term.

Recommend Modifying Governor’s Proposal in Several Ways. Most notably, we recommend modifying the proposal by: (1) enhancing technical assistance to help CCC campuses build capacity for continuing to expand use of OER; (2) reducing grant amounts from \$500,000 per degree to no more than \$100,000 per degree; and (3) prioritizing the use of existing OER, which are broadly available in most subjects, over the creation of new OER.

INTRODUCTION

Textbook affordability has been a longstanding concern for the Legislature. In 2008, the Joint Legislative Audit Committee requested the California State Auditor to report on the affordability of college textbooks. The resulting report confirmed that textbook costs constitute a growing financial burden for students. In response to the report, the Legislature has taken a number of actions to expand the availability of free digital textbooks and other free instructional materials. The Governor’s 2016-17 budget builds on these efforts by including \$5 million in one-time Proposition 98 funds for the California Community Colleges (CCC) to spur creation of

“zero-textbook-cost degrees.” These are degree pathways that students can complete entirely by taking courses that use only free instructional materials (called open educational resources [OER]) in place of publisher-owned textbooks.

This brief is intended to assist the Legislature in reviewing the Governor’s proposal. Below, we provide background on OER, describe California efforts to encourage their use, and highlight zero-textbook-cost degree initiatives currently underway in other states. We then describe the Governor’s proposal and provide our associated assessment and recommendations.

BACKGROUND

Open Educational Resources

OER Defined. OER are teaching, learning, and research resources that educators and others can freely use and repurpose. These resources range from course readings, modules, and tests, to full textbooks and courses to videos and software. In legal terms, OER differ from traditionally copyrighted textbooks and other instructional materials to which authors or publishers retain all rights (such as the right to reproduce, distribute, display, and make adaptations). Instead, OER authors can choose to retain only certain rights (such as the right to receive acknowledgment or “attribution”) under an open copyright license. Creative Commons, a nonprofit organization, has created a set of standardized open copyright licenses that authors may use to specify the allowable uses of their work. Another category of OER involves resources in the public domain, which are works whose intellectual property rights have expired, been forfeited, or are inapplicable.

These include many historical works (such as Shakespeare’s plays) and certain government publications.

Benefits of OER Adoption. The use of free materials in place of textbooks sold by publishers (1) reduces students’ costs of attendance, (2) increases access to instructional materials, and (3) can improve teaching effectiveness and efficiency. We discuss these benefits in more detail below.

Reduces Students’ Costs of Attendance. The cost of books and other course materials are notable for virtually all college students. Based on data from bookstores at all types of higher education institutions, the National Association of College Stores recently reported average 2014-15 textbook spending of \$563 across all students and \$1,019 (nearly twice the overall average) for first-year students. The amounts are higher for first-generation students, who spend about 10 percent more than other students even as they acquire fewer textbooks. These students are less likely to

use lower-cost options such as online editions and textbook rentals.

Increases Access to Instructional Materials.

Information about students' average spending on textbooks does not fully describe the impact of textbook costs on students. A 2012 survey with more than 20,000 respondents from 33 Florida colleges and universities published by the Florida Virtual Campus showed that, because of textbook costs:

- Nearly half (49 percent) of students had at some time in their academic careers taken fewer courses.
- Nearly as many (45 percent) had not registered for a specific course, and a similar share had dropped or withdrawn from a course.
- More than 60 percent of respondents had not purchased a required textbook for a course, and half said they had earned a poor or failing grade because of their inability to afford the textbook.

Using free course materials addresses these adverse impacts of textbook costs.

Can Improve Teaching Effectiveness and Efficiency. The process of adopting OER for a course often involves “stripping down” the course to its desired learning outcomes and building it back up by identifying teaching approaches and instructional materials to help students achieve each desired outcome. This is a very deliberate, targeted course design process that many experts believe improves the effectiveness of a course. In contrast, faculty members using a textbook often must adapt their teaching methods and course content to the available textbook material or add supplemental material that is directly relevant to the course's learning outcomes.

Drawbacks of Using OER. Though OER can have the above benefits, they also can have shortcomings. Finding and selecting OER can be time consuming. In addition, faculty are accustomed to relying on publishers to verify the quality and accuracy of textbooks, provide periodic revisions, and handle any copyright licensing for included content. Using OER shifts these responsibilities to faculty and their institutions.

OER Availability

Many Organizations Provide Access to OER.

Numerous individual institutions, state higher education systems, consortia of institutions, and nonprofit organizations provide online OER repositories and search tools. Figure 1 (see next page) highlights some of the most well-known of these efforts. All provide public access to OER, but they differ in several ways. Some, such as the Multimedia Educational Resources for Learning and Online Teaching (MERLOT) project led by California State University (CSU), include a vast array of resources across a variety of disciplines and educational levels contributed by authors from across the globe. Others, such as Rice University's OpenStax College and Carnegie Mellon University's Open Learning Initiative, include a small number of materials carefully developed for common undergraduate courses. Other efforts focus on certain subject areas, such as career technical education, or are targeted to certain types of institutions, such as community and technical colleges.

Plenty of OER in Most Disciplines.

Increasingly, experts note that sufficient openly licensed, high-quality course material exists for common college majors such as business administration, social sciences, general or natural science, and computer science, as well as general

education courses. Experts believe additional OER development is needed in a few areas, such as criminal justice, nursing, and social work.

OER Usage

Across Nation, OER Usage Low but OER Viewed Positively. In a 2014 survey of a

Figure 1

Many Organizations Across the Country Provide Access to OER

OpenStax College (Rice University)	Nonprofit organization publishing open textbooks for 20 gateway college courses (including biology, chemistry, macro- and micro-economics, sociology, United States history, and anatomy and physiology). Developed and peer-reviewed by educators to ensure readability, accuracy, and compatibility with course scope and sequence requirements.
Open Learning Initiative (Carnegie Mellon University)	Initiative publishing high-quality, research-based, classroom-tested online courses and materials. Currently offers educators free access to 27 complete courses they can adopt and adapt for their needs. Is working on several more with a focus on introductory community college courses.
Open SUNY Textbooks (State University of New York Libraries)	Initiative that publishes high-quality, cost-effective course resources. Engages faculty as authors and peer-reviewers and libraries as publishing service and infrastructure. Initial pilot published 15 open textbooks, with 12 more in development.
Candela Courses Lumen Learning	Catalog of more than 60 OER college courses in high-demand subjects. Made available as a public service by firm providing technical assistance for several system and state OER initiatives.
Open Course Library (WSBCTC)	Initiative offers collections of course materials that are free or cost no more than \$30 for system's 81 highest enrolled courses.
Free Education Initiative (Saylor Foundation)	Nonprofit foundation and associated Saylor Academy provide more than 100 open textbooks in common subject areas and dozens of open online courses that educators can mine for materials for their own courses.
B.C. Open Textbook Project (British Columbia Ministry of Advanced Education)	Curated collection of more than 100 open textbooks for the top 40 college subject areas in British Columbia. Many of the textbooks have been reviewed and vetted by postsecondary faculty.
College Open Textbooks Collaborative	Collaboration of 29 educational nonprofit and for-profit organizations affiliated with more than 200 colleges aiming to increase awareness and adoption of OER. Provides a repository of more than 100 peer-reviewed open textbooks and is in process of reviewing 250 more.
MERLOT (CSU)	Online learning community created in 1997 by CSU that offers free access to more than 60,000 peer-reviewed online teaching and learning materials across a wide range of disciplines.
OER Commons (ISKME)	Large database providing a single point of access from which educators and students can efficiently search, browse, and evaluate resources in project's growing collection of links to high-quality OER. Includes more than 3,700 full courses.
Community College Consortium for OER	Consortium of more than 250 community and technical colleges representing individual, regional, and statewide members in 17 North American states and provinces. Provides links to OER materials (in existing databases such as OER Commons) that are suitable for community college courses.
Skills Commons (Managed by CSU for federal Department of Labor)	Repository of free and open learning materials developed under a federal workforce training grant for career technical education and workforce development. Includes many types of materials, including course modules, online courses, and open textbooks.
Open CourseWare Consortium	Nonprofit global network of institutions, organizations, and individuals supporting collective development and use of OER through greater awareness, implementation support, and capacity-building. Provides access to thousands of full courses, open textbooks, and other OER.
University open courseware initiatives	Several universities, including Johns Hopkins, Harvard, Massachusetts Institute of Technology, Stanford, The Open University, Tufts, UC Berkeley, UC Irvine, Michigan, and Yale post videotaped lectures and course materials, many of which are free and openly licensed. Many of these courses also include copyrighted works that are available for purchase.

OER = open educational resources; WSBCTC = Washington State Board for Community and Technical Colleges; MERLOT = Multimedia Educational Resources for Learning and Online Teaching; and ISKME = Institute for the Study of Knowledge Management in Education.

representative national sample of higher education teaching faculty, nearly two-thirds of respondents said they had never heard of OER or knew little about OER. Most who were familiar with OER, however, had positive opinions. Among these respondents, about 90 percent reported that OER are easier or comparable to use and equally or more likely to be up-to-date compared to traditional materials. Three-quarters of respondents said OER are of equal or better quality than traditional materials. Nearly one-quarter of faculty thought OER were easier to find and select than textbooks, a similar share thought the opposite, and more than half found both types of materials equally easy/difficult to adopt.

Somewhat Similar Findings in California. A recent California survey found 60 percent of public California college and university faculty members surveyed were unaware or only vaguely aware of OER. Only 12 percent had adopted all or a portion

of an OER textbook. California faculty appeared more skeptical than the national sample, however, with respect to quality and ease of acquisition. Eighty percent said that academic quality is a concern in adopting OER. Two-thirds were concerned about the effort needed to find, review, and select materials, but 72 percent said they were willing to use OER given sufficient professional development assistance to modify the materials and adjust their courses.

Recent California Initiatives to Promote OER Use

California Has Several Initiatives to Encourage Use of OER. To accelerate OER adoption, the state has supported several initiatives (see Figure 2). Legislation enacted in 2012 (1) created the California OER Council to identify or create open textbooks for 50 high-enrollment courses across the three public higher education

Figure 2

Recent OER Initiatives in California

California OER Council

Chapter 621 of 2012 (SB 1052, Steinberg) established the council to develop or acquire high-quality, affordable, digital open source textbooks for 50 high-enrollment, lower-division courses that are common across the three segments. Includes three faculty members each from UC, CSU, and CCC. (The council identified 160 low-cost or free textbooks for the 50 courses and is completing the process of providing three faculty reviews for each textbook.)

California Open Online Library for Education (COOL4Ed)

Chapter 622 of 2012 (SB 1053, Steinberg) established the California Digital Open Source Library (now known as COOL4Ed) to house the materials identified by the California OER Council and make them available over the Internet for students, faculty, and staff to easily find, use, and modify. Statute requires that materials in the library bear a Creative Commons license that allows others to use, distribute, and create derivative works based on them, with attribution to the authors or creators.

Matching Funds for Council, Library, and OER Acquisition

Chapter 575 of 2012 (SB 1028, Committee on Budget and Fiscal Review) appropriated to CSU \$5 million from excess funds in the Governor's Scholarship Programs to support the council, library, and OER acquisition process, contingent on securing a dollar-for-dollar private match. A portion of the funding was to support a competitive proposal process for faculty to produce the 50 open source textbooks required by Chapter 621. (To date the council has matched and received \$1 million.)

OER Adoption Incentive Grant Program

Chapter 633 of 2015 (AB 798, Bonilla) redirected \$3 million of the funding provided in Chapter 575 for an incentive grant program to be administered by the California OER Council. The program will provide up to 100 grants of up to \$50,000 to provide incentives and rewards for campus, staff, and faculty efforts to expand the use of OER at CCC and CSU. (The council issued a request for proposals for these grants in February 2016.)

OER = open educational resources.

segments, (2) established an online library for the resulting materials, and (3) provided \$5 million in matching state funds to support these efforts. A goal of the legislation was for the segments to collaborate on methodically reviewing and selecting electronic textbooks so that instructors at each segment could adopt them without needing to duplicate the selection process.

Newest Initiative Provides \$3 Million for Adoption Incentives. Additional legislation in 2015 repurposed a portion of the funds remaining from the 2012 legislation for a new grant program to accelerate the use of OER at CSU and CCC by providing training and incentive funds to campuses. The program will require campuses to provide professional development and library and technology services for faculty interested in adopting OER.

Numerous Other OER Efforts Underway in California. In addition to these statewide efforts, a number of colleges, universities, and departments

within them have begun efforts to support and promote the use of OER in courses. The CSU's Affordable Learning Solutions project, for example, provides online search tools to help faculty members find free and low-cost course materials and offers training and incentive grants to spur their adoption.

Zero-Textbook-Cost Degree Initiatives in Other States

First Complete Degree Pathway Relying on OER. Until recently, only individual courses or groups of courses within a department had replaced textbooks with OER. In 2014, Tidewater Community College in Virginia created an OER degree pathway (called a Z-Degree) for students in business administration. (Please see the nearby box for information about degree pathways.) The pathway includes both general education and business courses and permits a student to earn an associate degree with no textbook costs. The

How Does a Zero-Textbook-Cost Degree Differ From a Traditional Degree In the Same Subject?

No Difference in Degree. Two students earning associate degrees in business administration—one by taking courses that use only open educational resources and the other by taking courses that use traditional textbooks—both earn the same degree.

Multiple Pathways to the Same Degree. For any degree program, a student selects which courses to take to meet the college's course requirements. These requirements typically include a set of core courses all students majoring in a subject must take, as well as courses students may choose from to satisfy general education and elective requirements. In addition to selecting individual courses, students often must select from among several course sections, each of which may have a different instructor, class schedule, textbook, and even mode of instruction (such as in-person or online). A student's degree pathway is the specific set of course sections the student takes to complete the college's degree requirements.

"Zero-Textbook-Cost Degree" Is Shorthand. A zero-textbook-cost degree pathway is one in which all the selected course sections use only instructional materials that are free to students. Colleges use this term to convey to students that they can earn a degree without paying textbook costs.

college's data show high student satisfaction, improved course completion, and significant cost savings for students. (Degree completion data are not yet available.)

Next Step: Pathways at All Virginia Community Colleges. With a combination of state, system, and private funding, the Virginia Community College System has supported three rounds of OER grant funding for colleges. The first round was for colleges to adopt OER for individual courses. The second round involved adopting series of OER courses. The current round, called "Zx23," is to develop at least one OER degree pathway at each of the system's 23 colleges beginning with the first 12 courses for each pathway in the current academic year (2015-16). The system is providing grants of up to \$15,000 to colleges for this purpose. Participating colleges agree to share their course materials with each other and the public. The system also is contracting with a technical support provider to help faculty and staff at each participating college build these pathways, host an OER course catalog in the colleges' learning management system, and evaluate the initiative's fiscal effect and impact on student success.

Other Efforts to Create OER Degree Pathways. The University of Maryland University College, an online college with more than 80,000 students, announced in 2015 that by fall 2016 all of its

courses, and, as a result, all of its degrees, will have zero textbook costs. Other OER degree projects are underway at the University of Mississippi, the Washington State Community and Technical Colleges, and the Maricopa Community College in Arizona, among others. Here in California, College of the Canyons is developing an associate degree for transfer in sociology that has zero textbook costs.

National Demonstration Project. Achieving the Dream, a national nonprofit organization focused on improving success for community college students, announced a new OER degree initiative in February 2016. The goal of the initiative, funded by a consortium of national foundations, is to lay the groundwork for nationwide adoption of zero-textbook-cost degrees. Grants to community colleges and college systems will support creation of OER degree programs at 20 to 30 colleges. The initiative will separately fund a technical assistance partner to provide intensive support to faculty and staff at participating colleges. The Community College Consortium for OER will lead a "community of practice" to foster collaboration between faculty and staff across institutions. Additionally, a research and evaluation partner will collect data on educational outcomes, financial sustainability of OER degrees, and formative evaluation to improve the work of the colleges and future adopters.

GOVERNOR'S PROPOSAL

Proposes \$5 Million (One Time) to Spur Creation of Zero-Textbook-Cost Pathways. Under the proposal, community colleges would compete for grants of up to \$500,000 each to offer an associate degree, certificate, or credential program a student can complete entirely by taking OER courses. The Chancellor could allocate up to 10 percent of the funds to a community college to administer the program and provide technical

assistance to participating colleges. Colleges would convene multimember teams of faculty, instructional designers, and others from within the CCC to develop the degree pathways. Colleges would post the resulting course and program materials in the California Open Online Library for Education, or COOL4Ed, repository and in the CCC's Professional Learning Network, an online clearinghouse of effective practices. The Chancellor

would report to the Legislature and administration by June 30, 2019 on the number of degrees offered, the number of students participating, the estimated

savings to students, and recommendations related to the program.

ASSESSMENT

Focus on OER Degree Pathways a Reasonable Next Step. To date, the state has supported efforts to compile available OER and encourage their use in individual courses. We believe the Governor’s proposal to develop entire OER degree pathways at CCC is a reasonable next step. Large numbers of students (including many low-income students) enroll at the community colleges. In addition, because all segments teach lower-division courses, OER courses developed for CCC degrees could be useful to CSU and University of California faculty.

Key Issues to Consider in Designing OER Degree Initiative. In refining this initiative, we believe the Legislature could draw on lessons learned from other states. Most notably, implementation leaders in other states have found that professional development and technical assistance for faculty and support service departments (such as libraries and technology offices) are vital to the success of OER initiatives. This type of support can facilitate short-term success (such as creating an initial OER degree) and help campuses build the internal capacity to continue expanding OER use over the long run. Leaders also have found that collaboration across faculty members results in improved quality and broader adoption of OER courses developed. Below, we summarize these and other lessons based on our conversations with initiative leaders and our review of reports, policies, and related documents.

Faculty Support Services Are Vital to Success. Faculty who have led OER initiatives in Virginia and other states emphasize the critical importance of robust support services for faculty. Some early OER efforts in Virginia failed due to lack of

sufficient support. In particular, faculty did not have enough help finding and selecting materials. The volume of available OER can be overwhelming and faculty typically do not have time to sort through all of it and select the best materials for their courses. (This would be especially true for part-time faculty, who provide nearly half of community college instruction in California.) In addition, a faculty member in a particular subject is not necessarily also an expert in course design, learning science, copyright law, or technology. Providing support in these areas allows faculty to focus on the academic work of reviewing, adapting, or developing instructional materials while others help identify potential resources; advise on design; and manage the licensing, posting, and integration with the colleges’ learning management systems.

Five Key Faculty and Institutional Support Services. Figure 3 lists five specific support services that experts recommend providing to faculty and institutions embarking on OER initiatives. With intensive assistance up front, faculty and institutions are able to develop the skills and garner the experience required to sustain the widespread use of OER. In particular, institutions are able to put in place crucial faculty support systems, such as instructional design assistance and library services attuned to OER requirements.

Collaboration Results in Greater Impact. Historically, OER initiatives have relied on individual faculty members or small numbers of faculty within a department or college to redesign courses. More recently, some initiatives have encouraged collaboration across colleges, for example, having math instructors from four

or five colleges work together to build an OER math course. The collaborative approach leads to improved courses (benefiting from more diverse input) and makes broad adoption beyond an individual course section or college far more likely.

Modest Incentives Can Promote OER

Adoption. Given sufficient professional development and technical assistance, initiative leaders have found that adopting OER need not require extensive faculty time. Most of the OER initiatives we reviewed have not funded course release for faculty members adopting OER. Instead, programs tend to offer grants to institutions that, in turn, they may distribute at their discretion. Grant amounts range from \$15,000 for developing and piloting the first 12 courses in Virginia’s Zx23 initiative to \$100,000 for developing and piloting entire one-year or two-year programs (typically 10 to 20 courses) in the national demonstration project. California’s OER Adoption Incentive Grant authorized by Chapter 633 of 2015 (AB 798, Bonilla) will provide \$1,000 per course section,

likely resulting in costs between \$3,000 and \$5,000 per course (which equates to between \$60,000 and \$100,000 for a full associate degree program). The Governor’s proposed funding of \$500,000 per degree is far higher than any of these other initiatives.

Faculty Should Be Able to Modify Materials.

In selecting materials for adoption, faculty and instructional designers place a high value on the adaptability of materials. This ability is especially important for connecting instructional materials to course learning objectives. To ensure faculty have this flexibility, course materials selected should have the type of Creative Commons license that permits educators to retain, reuse, revise, remix, and redistribute content (known as the “five R permissions” of OER). At the same time, it is important to recognize that not all courses should convert entirely to using only OER. Most literature courses, for example, require that students read original, traditionally copyrighted materials. (These materials typically are far less expensive than

Figure 3

Key Support Services Underlying Successful OER Initiatives

- ✓ ***Provide Training for Faculty Members, Instructional Designers, and Librarians on All Aspects of Using OER.*** Include information and skill-building about open licensing and finding, adopting, remixing, and creating OER. Goal of training is to build capacity at the institution to perform the faculty and support roles listed below, which are necessary for sustaining the long-term use of OER.
- ✓ ***Provide Individual Help to Instructors in Finding, Selecting, and Adapting OER to Meet Course Learning Outcomes.*** Take instructional design approach to connect materials with outcomes. Ensure quality of OER by recommending only materials that have been thoroughly vetted by faculty and other experts.
- ✓ ***Certify Materials.*** Ensure that new and existing materials adopted do not contain proprietary content, are properly published under an appropriate open license, and are accessible on multiple technology platforms (including tablets).
- ✓ ***Make Resulting OER Publicly Available.*** Help instructors place materials in a repository that is easily accessible to other instructors and students and permits them to revise and reuse the material freely.
- ✓ ***Provide Evaluation Data.*** Assess effectiveness of course materials in helping students meet learning outcomes. Provide recommendations for improving effectiveness of materials.

OER = open educational resources.

textbooks because they are available in the mass market.)

Plan for Replication and Sustainability. The OER initiatives we reviewed were created with one-time grants, often from private foundations or a combination of state and philanthropic funding. The Governor’s proposal also is for one-time funding. To make the best use of these one-time funds, institutions and systems have tried to implement their initiatives in ways that are sustainable and can be replicated. Tidewater Community College has developed a model for its Z-Degrees with this in mind. Key components of the model include:

- **Organizational Commitment.** Ensure leadership from faculty and support from administrators who can affect policies and resource allocation. Additionally, engage a broader network of stakeholders from student services, academic services, and institutional services.

- **Faculty Proponents.** Identify a core group of faculty across disciplines who are enthusiastic about redesigning courses based on desired student learning outcomes.
- **Professional Development for Faculty.** Ensure faculty have opportunities to gain knowledge and skills in OER licensing, attribution, and selection.
- **Professional Development for Librarians.** Provide opportunities for librarians to develop expertise in OER. Librarians have a vital role in the ongoing success of OER efforts by providing hands-on support for faculty.
- **Continuous Course Improvement.** Use a teach-analyze-improve process based on student assessment results aligned to course learning objectives.

RECOMMENDATIONS

Several Ways Legislature Could Improve Governor’s Proposal. Below, we describe eight specific modifications we recommend the Legislature make to the Governor’s proposal. These recommendations would avoid unnecessary duplication by taking advantage of existing efforts in California and other states, result in nearly three times as many zero-textbook-cost degrees in the next two years, and develop long-term capacity to continue expanding the use of OER at community colleges.

Build on Existing State Efforts. To date, the Legislature has supported development and posting of open textbooks for 50 high-enrollment courses. It also has funded a grant program to help faculty at CCC and CSU use those textbooks and other

free instructional materials in their courses. We recommend directing the Chancellor to coordinate the new zero-textbook-cost degree initiative with these earlier efforts to get the most value from the combined initiatives. For example, the Chancellor could work with the California OER Council to maximize the number of zero-textbook-cost degree pathways a college could assemble from the OER courses developed under the council’s grant program and those developed under the proposed new initiative. The Legislature could request that the Chancellor submit a vision and plan for this coordination prior to receiving funds.

Expand Technical Assistance Component. We recommend the Legislature amend the Governor’s proposal to include a stronger emphasis on

professional development and technical assistance. Specifically, we recommend providing as much as half the total funding to a professional development and technical assistance provider and specifying the types of services this entity would offer to campuses, faculty, and staff.

Reduce Grant Amounts. We recommend reducing the maximum award amount for each degree pathway to no more than \$100,000 and funding more degrees. At our recommended grant level, CCC could fund 25 degrees with robust technical assistance compared to only 9 degrees with very limited technical assistance under the Governor's proposal.

Prioritize Adopting and Adapting Existing Materials. Given the broad availability of existing high-quality OER in most subject areas, we recommend the Legislature avoid funding creation of new OER without very strong justification. To this end, the Legislature could direct the Chancellor to give higher priority for funding to colleges willing to use existing materials. New OER creation is time-consuming and relatively costly. It requires expertise in learning science, instructional

design, and technology beyond what most faculty members possess.

Set Time Lines. We recommend establishing a clear time line for piloting, evaluating, and offering OER courses and degrees. Both the Virginia and California OER Council initiatives require piloting the developed courses within the first year of the award. The Legislature could require that colleges participating in the zero-textbook-cost degree initiative pilot the full degree pathway over a two-year period, with at least half of the courses piloted each year.

Incorporate Three Other Lessons Learned. Specifically, we recommend: (1) giving priority to grant proposals that involve faculty collaboration across colleges and/or statewide; (2) requiring that OER identified under the initiative bear a type of Creative Commons license that permits modification by faculty (while recognizing that certain courses still may use some low-cost, more restrictively copyrighted materials); and (3) requiring the Chancellor's Office, working with faculty groups, to develop sustainability principles for California's zero-textbook-cost degree initiative.

CONCLUSION

The Governor's proposal to fund the creation of CCC zero-textbook-cost degrees has potential to improve both affordability and student success. It is not, however, best designed to promote broad and long-term impact across the CCC system and the state's other higher education systems. In this report, we have identified several modifications to

the Governor's proposal that we believe would have more far-reaching, long-lasting, and better impacts. We believe our recommended modifications would better target state resources in ways that are likely to reduce textbook costs and improve student affordability and success for large numbers of CCC students in the near future.

LAO Publications

This brief was prepared by Judy Heiman and reviewed by Jennifer Kuhn. The Legislative Analyst's Office (LAO) is a nonpartisan office that provides fiscal and policy information and advice to the Legislature.

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