Office of the President

TO MEMBERS OF THE ACADEMIC AND STUDENT AFFAIRS COMMITTEE:

<u>**DISCUSSION ITEM**</u>

For Meeting of July 21, 2021

UNIVERSITY OF CALIFORNIA EFFORTS TO ADVANCE AFFORDABLE COURSE MATERIALS AND OPEN EDUCATIONAL RESOURCES

EXECUTIVE SUMMARY

This item explores efforts to make learning at the University of California further affordable and equitable by supporting the development and adoption of low/no-cost course resources, including open educational resources (OER). Such efforts involve a partnership with faculty, libraries, campus bookstores, and other stakeholders.

BACKGROUND

Over the past decade, textbook affordability has emerged as an increasingly visible issue for students and parents, who may find the price of textbooks unexpected and financially challenging. From January 2006 to July 2016, the U.S. Bureau of Labor Statistics reports consumer prices for nationwide college textbooks increased 88 percent, compared with an increase of 21 percent for all items.[1] Various studies have shown that UC students, on average, spend more than $400 per year for textbooks.

<u>**Surveys of Student Textbook Expenses**</u>

While the costs of textbooks may have increased, the amount that students spend on textbooks has actually declined in recent years according to multiple sources, including the University's own Cost of Attendance Survey (COAS), the State's Student Expenses and Resources Survey, and the National Association of College Stores (see citations below). This is due, in part, to alternative means to acquire textbooks, like textbook borrowing or used book programs. Nevertheless, the holding down the costs of textbooks remain important for college affordability.

Central to the University of California's policy on undergraduate financial aid is the principle that college affordability must account for the total cost of attendance, not just tuition and fees. The Education Financing Model (EFM), the UC strategy on undergraduate financial aid, sets this as its first principle.

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[1] Bureau of Labor Statistics, U.S. Department of Labor, The Economics Daily, College tuition and fees increase 63 percent since January 2006 at https://www.bls.gov/opub/ted/2016/college-tuition-and-fees-increase-63-percent-since-january-2006.htm (visited June 22, 2021).

As part of estimating costs and setting estimates of student expense budgets, UC administers a UC Cost of Attendance Survey every two years (as of 2021).

Among the observations from the most recently completed survey, average annual expenses for textbooks and educational supplies declined between the 2013 and 2016 surveys, and that trend continued with the 2019 survey:

- In 2019 students reported average annualized spending of $451 on textbooks—34 percent less than what students reported in 2016 in constant dollars. This decrease in spending on textbooks continues the declining trend in textbook expenses over the past three COAS surveys. (see Figure 1).

Figure 1. UC Cost of Attendance Survey (COAS): Average Annual Expenses for Textbooks and Educational Supplies, 2013, 2016 and 2019 (constant 2019 dollars)

	2013	*2016*	*2019*	*DIFFERENCE 2016 to 2019*	
				Dollars	*Percent*
All students					
Textbooks	$844	$687	$451	($236)	-34%
Supplies	$174	$131	$122	($9)	-7%
Additional computer hardware	$160	$247	$238	($9)	-4%
Educational software	$44	$93	$90	($3)	-3%

Source: Setting the Total Cost of Attendance at UC, December 2019 (https://www.ucop.edu/enrollment-services//data-and-reporting/other-student-financial-services-reports/coas19-report-final.pdf)
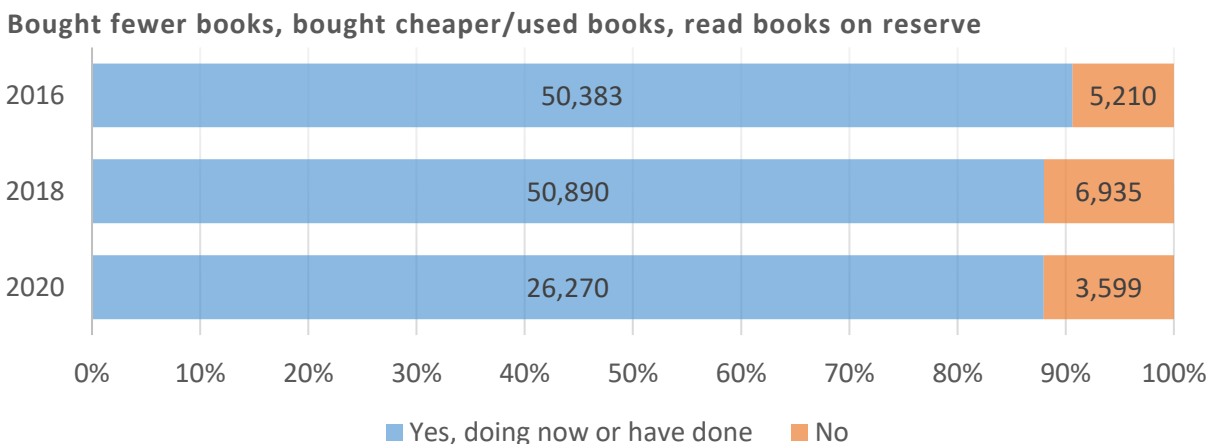
Similar to the findings of the UC COAS surveys, the California Student Aid Commission (CSAC) Student Expenses and Resource Survey (SEARS) found that California students in 2018–19 reported spending about half of the inflation-adjusted 2006–07 total on textbooks and other educational supplies.[2] The National Association of College Stores, in a 2020 student survey, found that average annual spending on course materials had decreased by 28 percent since 2015—from $602 to $456.[3]

This decrease in spending on textbooks does not necessarily reflect a decrease in the price of textbooks and course materials. In the past five years, the majority of UC Undergraduate Experience Survey (UCUES) respondents—91 percent in 2016, 88 percent in 2018 and 2020—indicated that they "bought fewer books, bought cheaper/used books, read books on reserve" to meet college expenses (Figure 2). Cost-saving strategies like these may be good for the student's budget, but could impact their access to important academic content if used to excess.

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[2] California Student Aid Commission, 2018-19 Student Expenses and Resource Survey: An Initial Look at the Obstacles Students Face Affording Higher Education, v4., November 7, 2019. Available online at: https://www.csac.ca.gov/sites/main/files/file-attachments/2018-19_student_expenses_and_resources_survey_web.pdf?1575327209

[3] National Association of College Stores, Student Watch™ Attitudes and Behaviors Toward Course Materials 2020 Report. Available online at: https://www.oncampusresearch.org/student-watch

Figure 2. UCUES responses to "Which of the following have you done this current academic year to meet college expenses?", 2016, 2018 and 2020

Bought fewer books, bought cheaper/used books, read books on reserve

Year	Yes, doing now or have done	No
2016	50,383	5,210
2018	50,890	6,935
2020	26,270	3,599

■ Yes, doing now or have done   ■ No

Source: University of California Undergraduate Experience Survey (UCUES) Data Tables; 2016, 2018 and 2020 (https://www.universityofcalifornia.edu/infocenter/ucues-data-tables-main)

In response to concerns about basic needs as well as feedback from student focus groups, the EFM Steering Committee, which oversees the COAS and advises on the implementation of undergraduate financial aid strategy at UC, implemented innovations in how it sets student expense budgets for financial aid packages. "Books and Supplies" allowances now use the average reported expense for textbooks for those students reporting those expenses rather than a per capita average including those who reported no textbook expenses. This results in an allowance four percent higher than the previous year allowance, which will then be accounted for in financial aid packages.

OPEN EDUCATIONAL RESOURCES

While UC continues to engage in efforts to accurately account and provide allowances for students' textbook costs in financial aid packages, affordable access to course material and the impacts on learning outcomes have become issues of growing concern and action. Student advocacy organizations such as the California Public Interest Research Group (CALPIRG) Students, the UC Student Association (UCSA), and multiple UC campus student associations have issued calls to action that highlight the ongoing textbook affordability barriers that can impede student success. In February 2021, UCSA passed a resolution in favor of a grant-funded program for open textbooks to incentivize professors to accommodate accessible and open resources (Attachment 1).

Definitions

- **Open Educational Resource (OER):** Educational content that is openly licensed. OERs include a wide range of materials: assessments, assignments, books, case studies, courses, journals, primary sources, reference materials, simulations, tutorials, tests, and textbooks.

- **Open License:** A license that contains provisions that allow others to reuse another creator's work under specific conditions. Currently, the most popular open licenses are the Creative Commons licenses.

- **Open Access (OA):** A set of principles and practices through which research outputs are distributed online, free of cost or other access barriers. OA often is connected with open licenses, but does not necessary require the adoption of an open license (e.g., if the permitted right for a OA resource is read only).

- **The Five Rs (5R):** A set of five permissions that define what is allowed for content to be OER:

    Reuse: Content can be reused in its unaltered original format—the right to use the content in a wide range of ways (e.g., in a class, in a study group, on a website, in a video)

    Retain: Copies of content can be retained for personal archives or reference—the right to make, own, and control copies of the content (e.g., download, duplicate, store, and manage)

    Revise: Content can be modified or altered to suit specific needs—the right to adapt, adjust, modify, or alter the content itself (e.g., translate the content into another language)

    Remix: Content can be adapted with other similar content to create something new—the right to combine the original or revised content with other material to create something new (e.g., incorporate the content into a mashup)

    Redistribute: Content can be shared with anyone else in its original or altered format—the right to share copies of the original content, your revisions, or your remixes with others (e.g., give a copy of the content to a friend)

Open Educational Resources Efforts and Other Services to Advance Course Material Affordability

Various initiatives and pilot projects across UC have been developed to mitigate some of the impacts of the costs of textbooks and promote course material affordability. A range of strategies, including the adoption, adaptation, and creation of OER are being deployed and promoted on UC campuses and include bookstore-led, library-led, and faculty-led initiatives.

- **Bookstore-led programs** include a range of "day-one" and "inclusive access" programs that seek to lower textbook costs through publisher negotiations and cost-saving digital formats.

- **Library-led efforts** characteristically focus on leveraging library owned and licensed content to replace course material costs where possible, faculty grants to support conversion of courses to open and library-licensed resources, and creation of OER.

- **Faculty-led efforts** have focused on the conversion of a specific textbook or creation of an open learning environment to replace a commercial text.

Select examples of these types of efforts and programs on UC campuses are described below and will be presented to the Regents. Additionally, open access is an important and related element of open and affordable course materials. While not further documented here, the UC Libraries' efforts to transition scholarly publishing from subscription-based models to open access has further increased the pool of journals, books, and other open content that can be used by faculty as course materials, with zero cost to students.

UC Berkeley Affordable Course Content (ACC) Pilot
In cooperation with the Center for Teaching and Learning, Associated Students of the University of California, and Educational Technology Services, the UC Berkeley Library launched an Affordable Course Content (ACC) pilot for 2017–18 to explore how to reduce student costs for assigned course materials. The ACC pilot tested, at limited scale, three Library-led services intended to help reduce the costs of assigned course content for Berkeley students, while also allowing the Library to gauge feasibility and efficiency were those services expanded.

1. Course Packs: The Library enabled instructors to create free and electronic course readers, utilizing library-licensed and open content, in lieu of instructors requiring students to purchase print copies from third-party vendors.
2. eBook Swaps: The Library acquired unlimited user licenses for books that the instructors would otherwise have required students to purchase in print.
3. Open educational resources: The Library and Center for Teaching and Learning supported instructors in shifting from traditional textbooks to OERs, and included support for OER adaptation and creation.

The Library received financial support for participation in the ACC pilot programs from The Arcadia Fund. Over the course of the three pilot semesters (fall 2017, spring 2018, and fall 2018), the Library supported over 40 courses, representing approximately 2,400 students, and estimated potential student savings of over $200,000 for the pilot period alone.

UC Davis AggieOpen Program
The recently launched UC Davis AggieOpen program aims to support instructors in developing alternatives to expensive textbooks and course materials by supporting the adoption, adaptation, or creation of OER. These OER materials may include existing scholarly resources (such as articles, books, or conference papers) that are freely available through open access publishing; simulations, visualizations, and virtual labs accessible via open-source software; and learning objects and texts that are openly licensed or that instructors create themselves and make available under an open license.

AggieOpen also coordinates with the Library for traditional course reserves (particularly e-reserves) and with the Bookstore's Equitable Access initiative—a program that provides every UC Davis undergraduate student access to their textbooks for a flat fee (currently $199 per quarter). The Library hosts AggieOpen and its Steering Committee is co-chaired by a Library administrator and the Director of LibreTexts. The Steering Committee is composed of University faculty, instructors, librarians, students, and representatives from other campus stakeholders, to advise on the implementation of the program.

UC Irvine OER Efforts
UC Irvine is a sustaining member of OE Global (formerly the Open Education Consortium), a non-profit organization supporting the development and use of open education around the world. UCI sponsors a website (http://open.uci.edu/) that links to various open educational resources, including some early initiatives like UCI OpenChem.

For the past year, UCI Libraries has been reviewing undergraduate high-enrollment class syllabi and licensing as many educational resources as possible to provide UCI students with "zero-cost" access to those course materials. In future, the UCI Libraries will explore further ways to collaborate more closely with faculty, to do this more systematically, and to capture data on potential cost savings to students.

The UCI Academic Senate Cabinet is reviewing a proposal from the Council on Teaching, Learning and Student Experience recommending that the UCI Libraries, in coordination with the Division of Teaching Excellence and Innovation and the Graduate Division, host a webinar for instructors on open education resources, open source, and other resources currently available to address the affordability of course materials.

UCLA Affordable Course Materials Initiative
The UCLA Affordable Course Materials Initiative encourages instructors to use low-cost or free alternatives to expensive course materials, such as open-access scholarly resources, Library-licensed and owned resources in print or digital form, reformatted special collections items, and learning objects and texts that faculty create themselves. By more closely aligning Library collections, services, and expertise with instructional needs, it has helped lower the cost of course materials for thousands of UCLA students while achieving instructors' educational objectives.

Awards pair instructors with a team of Library specialists who help them identify, access, adapt, and adopt alternative course materials. Award amounts are available of $1,000 each for instructors teaching courses with enrollments of fewer than 200 students and of $2,500 each for instructors teaching courses with enrollments of more than 200 students. Collection development awards may also be designated to build or enhance library collections in support of specific courses. The financial sums are meant to offer an incentive for the time it will take instructors to identify new resources, adjust syllabi, and modify assignments and can also be used to cover any actual expenses incurred by the instructor.

The initiative has been endorsed by the Office of the UCLA Executive Vice Chancellor and Provost and the UCLA Academic Senate. It launched in 2013 and has supported over 125 courses, bringing over $1 million in potential savings to students.

UC Merced Zero-Cost Course Materials Grant
The UC Merced Zero-Cost Course Materials Grant (ZCCM) is a collaboration between the UC Merced Library and Center for Engaged Teaching and Learning to support the use of OER and Library licensed electronic materials to ensure the availability of course materials to students at zero cost. The aim of this initiative is to boost student success by removing some of the financial barriers preventing students from obtaining needed educational materials.

The ZCCM grant is a three-year pilot program; the first award cycle took place in fall 2018 with the final RFP taking place in fall 2020 for courses being taught in spring 2021. Faculty applied for the following awards levels:

- $1,000 one-time award for the adoption of an existing OER and/or use of Library licensed e-materials.
- $1,500 one-time award for modifying an existing OER. OER may be modified by editing or creating content such as additional chapters, modules, question banks, or lecture slides.

UC Riverside's Affordable Course Materials Initiative
UC Riverside's Affordable Course Materials Initiative (ACMI)launched in 2015 as a partnership between UCR faculty, the Library, and Computing & Communications to alleviate the financial burden of textbooks on UCR students. Generously funded through the Student Technology Fee, this three-year project provided an incentive grant to course instructors who commit to bringing textbook and course reading costs for students in their classes to zero dollars. Successful grant recipients were matched with a teaching librarian to assist in identifying appropriate open or library-licensed materials for the course, and the UCR instructional design team also assisted in integrating course materials with the learning management system. Between fall 2015 and spring 2018, this program is estimated to have saved UCR students over $1.5 million in textbook costs.

In April 2018, the ACMI co-sponsored a workshop with UCR's chapter of CALPIRG on textbook affordability and access to education, where UCR students and faculty shared their perspectives and experiences on these issues. You can view the video here: https://mediasite.ucr.edu/Mediasite/Play/0838a3dbdebf4cf0b9bd2f7a343d62bf1d

While the UCR ACMI funding was not renewed, the Library is pursuing a new OER-focused project with UCR's center for teaching and learning.

UC Santa Cruz OER Grant Program
The UC Santa Cruz Library is currently launching a pilot OER grant program; this is part of an initial Library strategy to further encourage the use of open and library resources in undergraduate courses to advance zero-cost learning materials for students. The grant program aims to:

- Provide a venue for raising campus awareness of OER
- Incentivize and/or provide a clear pathway for faculty already interested in transitioning to OER but unsure how or where to begin
- Teach the Library more about how to effectively support faculty in making this transition to OER for course materials

Grant recipients will be matched with a research librarian to assist in identifying open and/or library-licensed materials for the course, if needed. A review committee is also planned to evaluate grant proposals; ideally, it will include subject matter experts from across the divisions (e.g., at least one teaching faculty member and an online instructional designer). All grant recipients will be expected to participate in program assessment activities and share their experiences and outcomes.

UC San Diego Participation in Association of American Colleges & Universities (AAC&U) 2021 OER Institute
A UC San Diego team is participating in the AAC&U 2021 OER Institute to further develop a comprehensive, campus-wide effort in support of affordable learning. One projected outcome from the institute is a multi-year plan for expanding adoption of OERs and lowering the cost of course materials for students. The UC San Diego team advancing this work is led by a library representative and the membership includes experts from various units in Academic Affairs, who have stakes in student success and faculty teaching support, including the Library and the Teaching + Learning Commons.

UC Santa Barbara OER Efforts
In addition to leveraging the use of library and open content in the classroom, the UC Santa Barbara Library has dedicated experts monitoring and participating in broader, national discussions around advancing affordable course materials and OERs. As part of this work, a UCSB librarian was selected to participate in the 2020–21 Scholarly Publishing and Academic Resources Coalition (SPARC) OER Leadership Program. Two surveys related to affordable course materials and OERs are planned for 2021: one for faculty and the second for UCSB Promise Scholars (high-achieving, low-income Californians selected for four-year scholarships to UCSB in a unique program created by the campus).

LibreTexts Project
The LibreTexts Project (https://libretexts.org/) is a leading, non-commercial open textbook organization initiated at UC Davis by Delmar Larsen, Professor in the Department of Chemistry and the Biophysics Graduate Group at UC Davis. The mission of LibreTexts is to unite students, faculty and scholars in a cooperative effort to develop an easy-to-use online platform for the construction, customization, and dissemination of open educational resources (OER), particularly for courses relevant to academic programs, to reduce the burdens of unreasonable textbook costs to our students and society.

With LibreTexts, students, faculty, and outside experts work together to build freely available open education resources that supplant conventional paper-based textbooks. LibreTexts currently encompass thirteen widely used college-level disciplines from chemistry to humanities. Used

across the nation as primary course textbooks and as supplemental learning resources, LibreTexts have already recorded more than 154 courses using LibreTexts, 223 million students served, and an estimated $31 million saved in textbook and other course materials costs.

In 2018, LibreTexts received the $5 million Open Textbooks Pilot Program award from the U.S. Department of Education's Fund for the Improvement of Postsecondary Education (FIPSE). The award, funded by Congress in the 2018 Fiscal Year omnibus spending bill, is intended to decrease the burden of textbook costs on college students while increasing the availability, usage, and educational value of open textbooks that are freely available to download, edit, and share to better serve all students. This funding is utilized to sponsor faculty at partner institutions to both create content and adapt existing content for their specific courses.

ATTACHMENT: 2020–2021 UCSA Support for a Grant-Funded Program for Open Textbooks at the UCs

KEY TO ACRONYMS

AAC&U	Association of American Colleges & Universities
ACC	Affordable Course Content
ACMI	Affordable Course Materials Initiative
CALPIRG	California Public Interest Research Group
COAS	Cost of Attendance Survey
CSAC	California Student Aid Commission
EFM	Education Financing Model
FIPSE	Fund for the Improvement of Postsecondary Education
NACS	National Association of College Stores
OA	Open Access
OER	Open Educational Resources
SEARS	Student Expenses and Resource Survey
SPARC	Scholarly Publishing and Academic Resources Coalition
UCSA	UC Student Association
UCUES	UC Undergraduate Experience Survey
ZCCM	Zero-Cost Course Materials Grant

2020-2021 UCSA Support for a Grant-Funded Program for Open Textbooks at the UCs

Primary Sponsors
Aidan Arasasingham, UCSA President, UC Los Angeles External Vice President
Vincent Rasso, UCSA Chair, UC Riverside Vice President of External Affairs
Jose Edgardo Lopez, UC Merced External Vice President
Alia Reynolds, UC Santa Barbara External Vice President of Statewide Affairs
Alan Calderon, UC Irvine External Vice President
Maria Martinez, UC Davis External Affairs Vice President

WHEREAS, the Bureau of Labor Statistics reports that the price of textbooks has risen 88 percent between 2006 and 2016 in the US[4]; and,

WHEREAS, setting aside over $1,300 for textbooks and material fees each year is a financial burden many University of California students cannot afford[5]; and,

WHEREAS, 65 percent of students report not buying a textbook required for a course because of its price even if they were concerned that their grade would suffer as a result[6]; and,

WHEREAS, open textbooks, which are free to read and share under an open copyright license, can combat the exponential rise of textbook prices; and,

WHEREAS, 368 UC professors have signed on in support of open textbook use; and,

WHEREAS, UCLA Libraries' Affordable Course Materials Initiative has decreased the cost of course materials at UCLA for thousands of students by providing awards for faculty who transition to low-cost course materials[7]; and,

WHEREAS, many other higher-education systems, including the California Community Colleges, the California State Universities, and the State Universities of New York have launched their own programs to encourage the use of open textbooks, making information readily accessible for all students and providing students and their families with financial relief[8][9]; and,

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[4] https://www.bls.gov/opub/ted/2016/college-tuition-and-fees-increase-63-percent-since-january-2006.htm

[5] http://www.admission.ucla.edu/prospect/budget.htm

[6] https://www.usnews.com/news/articles/2014/01/28/report-high-textbook-prices-have-college-students-struggling

[7] https://www.library.ucla.edu/about/about-collections/open-scholarship-collections-policy/affordable-course-materials-initiative

[8] https://www.ccccco.edu/About-Us/Chancellors-Office/Divisions/Educational-Services-and-Support/Open-Education-Resources

[9] https://sparcopen.org/our-work/list-of-oer-policies-projects/

WHEREAS, Governor Newsom of California has proposed that 15 million dollars be set aside in the California 2021-2022 state budget for open educational resources in higher education to address textbook affordability for community college students[10]; and,

WHEREAS, the efforts of colleges to invest in open educational resources have saved students millions of dollars, helped improve academic performance of students, and are cost-efficient for the institutions themselves[11]; and,

WHEREAS, the chapters of CALPIRG Students will communicate the support for this initiative, including this resolution and the tangible support of faculty and students, to the University of California Board of Regents;

THEREFORE, LET IT BE RESOLVED THAT, the 2020-2021 University of California Student Association affirms its support for establishing an open textbook grant program UC-wide and supports CALPIRG Students' efforts to establish support; and,

LET IT BE RESOLVED THAT, the 2020-2021 University of California Student Association will showcase further support by passing respective resolutions at their home campus in support for a grant-funded program for open Textbooks at the UCs; and,

LET IT FURTHER BE RESOLVED THAT, the 2020-2021 University of California Student Association strongly encourages the UC Regents to implement a UC-wide grant-funded program for open textbooks that would incentivize professors to make the switch to accessible open resources.

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10 https://sparcopen.org/our-work/state-policy-tracking/
11 https://sparcopen.org/our-work/state-policy-tracking/