WICHE INSIGHTS

November 2021

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Advancing OER Initiatives: A Responsible Use of COVID-19 Emergency Relief Funds

Introduction

To mitigate the fiscal effects stemming from the COVID-19 pandemic, the federal government has enacted several emergency relief bills. These emergency relief bills have introduced an influx of funding that has states and higher education institutions working to identify investments that are responsive to the pandemic and its effects. Effects include a national 5.9 percent enrollment drop in spring 2021 from the previous year for all incoming students and an 11.3 percent drop at community colleges, according to the National Student Clearinghouse Research Center.[1] Institutional responses to the pandemic are varied but many include reengaging students who left or did not start their postsecondary education because of the pandemic and continuing to boost student success for those that remained enrolled amid a tumultuous year, all while not creating new ongoing costs.[2] One approach to the effects of the COVID-19 pandemic is the use of Open Educational Resources (OER), which, as a high-impact practice, have been found to increase student success and institutional efficiency. Implementation of OER is a wise investment, as it reduces the costs of course materials like textbooks; broadens collaboration among faculty, staff, and administration; improves student outcomes; and can be a key part of achieving postsecondary strategic goals and state policy priorities.[3] WICHE and the other regional compacts, with funding from the William and Flora Hewlett Foundation, are working with states and institutions to scale the use and effectiveness of open education.

Key Findings

- Research supports OER as a key tool for improving student outcomes and helping to address inequities in postsecondary education.
- States and institutions may have opportunities to invest in OER development and adoption with strong federal financial support for pandemic recovery.
- Many states, systems, and institutions have worked to scale OER and have demonstrated positive returns on investment.

OER Impact on Students and Institutions

OER and Student Success. Research strongly supports the idea that scaling the use of OER can contribute to improved student outcomes and potentially provide other economic benefits for students. A leading study out of the University of Georgia found that OER increase student learning outcomes and reduce attainment gaps among racially and ethnically diverse students, Pell Grant-eligible and non-eligible students, and part- and full-time students.[4] A survey conducted among 4,000 students by U.S. PIRG found that 66 percent of students skipped purchasing required course textbooks – a practice that can have detrimental effects on student completion and graduation rates. Additionally, 11 percent reported skipping a meal to purchase course materials.[5] OER can help mitigate these issues by making course materials freely available and widely accessible.

> The William and Flora Hewlett Foundation defines Open Education as the "myriad of resources, teaching practices and education policies that use the flexibility of OER to provide learners with high-quality educational experiences."

Institutional Impact of OER. OER have also been found to have direct economic impacts on postsecondary institutions and their students. Achieving the Dream's OER Degree Initiative expanded the ability of students to take OER courses throughout their entire degree program. The initiative involved 38 community colleges across 13 states and over 2,000 faculty who worked toward building an infrastructure that would support OER degree pathways. Infrastructure developed included coordinating OER courses across departments; updating policies and practices in service and administrative units to support OER adoption; established professional development programs on OER for faculty; connected OER degree pathways with an institution's strategic goals; communicated OER options to students strategically; and streamlined efficiencies in the searching, revising, and sharing of OER materials among faculty. The OER Degree Initiative was found to increase student access and student outcomes, enhanced faculty members' pedagogical approaches, and increased collaboration across academic departments. Most importantly, though, the initiative found positive economic impacts for institutions developing OER degree pathways. Institutions in the program not only saved students a cumulative $10.7 million throughout the program, but institutions experienced $1.03 in gross revenue for every dollar invested in the program, indicating a 3 percent return on investment. This means that although an initial investment was required, institutions did not experience long-term financial burdens for developing an OER degree pathway, while at the same time supporting students financially.

OER in the COVID-I9 Era

OER and the COVID-19 Fiscal Context. Not all states and postsecondary institutions were left in fit financial shape by the three emergency relief bills; some still faced gaps. Many are postsecondary institutions working to identify promising one-time investments to boost student success. Investing short-term funds to scale OER initiatives and programs in their states can be one approach to support student success. OER have demonstrated lasting positive results even with modest investment. One-time funds can support a variety of OER initiatives such as Zero Textbook Cost Degree Programs; OER faculty grants to provide professional development and incentives for instructors who adopt, develop, or refresh existing OER; increased adoption of adaptive technology in OER; the development of OER in low-OER saturation areas such as Career and Technical Education (CTE); or the implementation of course marking of OER courses to ease transparency for students during the registration process.

Funding OER initiatives can increase student access. Multiple studies have confirmed OER's ability to increase student attainment and help close equity gaps and an influx of financial support could scale and broaden these efforts.[6] Most states have some level of OER activity already in place that would make investing in OER initiatives a relatively streamlined process.

Additionally, OER is adaptable to diverse state and higher education governance structures, systems and institutions in the west have, with modest support, saved students millions of dollars, increased faculty collaboration, and connected OER to an institution's strategic goals.[7] Investment could help states and institutions adopt similar OER initiatives and scale and broaden the work already occurring in some of these states and systems.

- In the first year of Colorado's OER Grant Program, institutions across the state saved students more than $3.9 million and that number represents "more than six times the return" of the state's initial investment. Colorado has received broad bipartisan support for its OER activities, and the program enjoys statewide representation through its Open Educational Resources Council.[8]
- The University of Hawai'i System implemented a robust course marking system that allows students to find courses that use OER during the registration process easier and allows the system to pull data to track various student outcome data points on OER. Additionally, the UH system has advanced its Open Content and Open Source initiative, leading the way toward the development of educational tools and materials using open-source software and open development documents.
- The Maricopa Millions Open Educational Resources Project, a districtwide initiative in Phoenix, Arizona, has saved students more than $11 million over its five-year trajectory and has led the district to develop high-impact practices and vast teaching resources for faculty.
- In Montana, the Montana University System, with support from its Board of Regents, has saved students $142,710 in its first year of adoption and is projected to save students $536,735 in its second year. In 2020, the program led to the development of 786 textbooks with support from more than 300 faculty.

- In Utah, Salt Lake Community College has developed over 1,000 OER courses, saving its more than 170,000 students over $15 million.
- In Idaho, Gov. Brad Little and the state's legislature appropriated $1 million, as a one-time commitment from the state's Governor's Emergency Education Relief funds, for a zero-cost textbook program. The passage of HB 318, which appropriated the funds, demonstrates the state's commitment to a strong public education system for Idahoans using low-cost/no-cost course materials.

Possible Short-Term OER Investments. Multiple potential avenues exist for using one-time funds to scale the adoption and use of OER in a state or at an institution.

- **Career and Technical Education (CTE) and OER**. CTE has not experienced the same level of OER proliferation as those found in the general education curriculum. According to the U.S. Department of Education, 30 million jobs do not require a bachelor's degree and provide median earnings of $55,000 or more.[9] Today, 77 percent of high school students earn at least one CTE credit through a concurrent or dual enrollment program bridging K-12 and postsecondary, and CTE enjoys broad participation among racially and ethnically diverse students. Investment in expanding OER in CTE could have important effects toward closing skills and equity gaps and meet the workforce needs of states – and the nation – by making course materials freely accessible, especially among high school students.
- **Course Marking and Institutional Transparency Using OER.** Adopting and implementing course markings makes it easier for students to find no-cost/low-cost courses and to make the most appropriate choice for themselves. Course marking is the process by which courses are assigned attributes that make them searchable. Today, course markings are used for a variety of reasons, which include modality (e.g., online, hybrid, in-person) or identifying courses with a service-learning component. Investments made to support course marking for courses using OER can facilitate and expedite its implementation. Institutions and systems have different policies and software and technical capabilities making course marking implementation a unique process at each institution and/or system.
- **Zero Cost Textbook Degree and Certificate Pathways.** Zero Cost Textbook Degree Programs mean that students can complete degrees or earn certificates with no textbook costs. Instructors can use alternative instructional materials and teaching methods, which often include OER. Course materials can include library resources that are available to students through password-protected E-Reserve systems or learning management systems; feature materials that are publicly licensed or are part of the public domain; or materials that are freely available online.[10]
- **Innovation Grants for OER.** Small institutional grants can support faculty cohorts or institution-level OER activities across entire states. Grants would support faculty and their institutions with the development and scaling of OER, broaden innovation, reduce costs for students and institutions, and increase student success. Investments in OER would support faculty creating and updating OER, which takes time and effort.

Conclusion

State investment in OER is a bold and research-driven way to close skills and equity gaps, increase institutional efficiency, and increase student success. Importantly, OER can be revised, remixed, and redistributed indefinitely, before and after a course, making a state's investment in OER long-lasting. OER is a fiscally responsible approach to increase postsecondary access and increase student completion, a goal that has been immediately jeopardized by the effects of the COVID-19 pandemic. Supporting OER and OER leaders already doing this work is one effective way to meet a state's postsecondary goals and priorities, as well as a responsible use of COVID-19 emergency relief funds. All states in the West have some level of OER activity and infrastructure in place, ensuring that any emergency relief funds appropriated to OER would be used to advance ongoing work to increase students access and success, faculty professional development and innovation, and institutional efficiency and transparency. OER is a wise and responsible use of state dollars that just makes sense.

Endnotes

[1] National Student Clearinghouse Research Center, "COVID-19: Stay Informed with the Latest Enrollment Information," accessed May 31, 2021, at https://nscresearchcenter.org/stay-informed/.

[2] H.R. 748 CARES ACT; H.R. 133 Consolidated Appropriations Act, 2021; H.R. 1319 American Rescue Plan Act of 2021.

[3] John Hilton III, "Open Educational Resources and College Textbook Choices: A Review of Research on Efficacy and Perceptions," *Educational Technology Research and Development*, no. 64, 573-590 (2016) accessed May 25, 2021, at https://doi.org/10.1007/s11423-016-9434-9.

[4] Nicholas B. Colvard, C. Edward Watson, and Hyojin Park, "The Impact of Open Educational Resources on Various Student Success Metrics," *International Journal of Teaching and Learning in Higher Education*, 30, no. 2, 262-276 (2018) accessed May 25, 2021, at https://www.isetl.org/ijtlhe/pdf/IJTLHE3386.pdf.

[5] Cailyn Nagle and Kaitlyn Vitez, "Fixing the Broken Textbook Market, 2nd Edition," U.S. PIRG (2020, June), accessed May 19, 2021, at https://uspirg.org/sites/pirg/files/reports/Fixing-the-Broken-Textbook-Market_June-2020_v2.pdf.

[6] Amy T. Nusbaum, Carrie Cuttler and Samantha Swindell, "Open Educational Resources as a Tool for Educational Equity: Evidence from an Introductory Psychology Class," *Frontiers in Education*, 4, no. 152, Article 152 (2020) accessed May 25, 2021, at https://doi.org/10.3389/feduc.2019.00152.

[7] Rebecca Griffiths, Jessica Mislevy, Sam Wang, Linda Sheer, Alexandra Ball, and Donna Desrochers, "OER at Scale: The Academic and Economic Outcomes of Achieving the Dream's OER Degree Initiative," SRI International (2020, February 20), accessed August 23, 2021 at https://www.achievingthedream.org/resource/17993/oer-at-scale-the-academic-and-economic-outcomes-of-achieving-the-dream-s-oer-degree-initiative.

[8] Colorado Department of Higher Education, "Colorado Rises: Transforming Education Practices through Open Educational Resources" accessed May 25, 2021, at http://masterplan.highered.colorado.gov/wp-content/uploads/2020/10/FINAL_OER_Report_2020_9_29_20.pdf.

[9] U.S. Department of Education, "Bridging the Skills Gap: Career and Technical Education in High School," (2019, September), accessed May 25, 2021, at https://www2.ed.gov/datastory/cte/index.html.

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Publication Number 6A1000c
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