

Open Educational Resources (OER) Grant Program

**A Report to the Texas Legislature in accordance with the General
Appropriations Act, HB 1, Article III, Section 44, 88th Texas
Legislature**

October 2024

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The mission of the Texas Higher Education Coordinating Board (THECB) is to serve as a resource, partner, and advocate for Texas higher education, resulting in a globally competitive workforce that positions Texas as an international leader.

Agency Vision

The THECB will be recognized as an international leader in developing and implementing innovative higher education policy to accomplish our mission.

Agency Philosophy

The THECB will promote access to and success in quality higher education across the state with the conviction that access and success without quality is mediocrity and that quality without access and success is unacceptable.

The THECB's core values are:

Accountability: We hold ourselves responsible for our actions and welcome every opportunity to educate stakeholders about our policies, decisions, and aspirations.

Efficiency: We accomplish our work using resources in the most effective manner.

Collaboration: We develop partnerships that result in student success and a highly qualified, globally competent workforce.

Excellence: We strive for excellence in all our endeavors.

The Texas Higher Education Coordinating Board does not discriminate on the basis of race, color, national origin, gender, religion, age, or disability in employment or the provision of services.

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Executive Summary

Senate Bill 810, 85th Texas Legislature, Regular Session, established the Open Educational Resources (OER) Grant Program, which was designed to incentivize faculty at Texas institutions of higher education to adopt, modify, redesign, or develop courses that use only open educational resources. The General Appropriations Act, House Bill 1, 88th Texas Legislature, Article III, Section 44, requires the Texas Higher Education Coordinating Board to provide a report to Legislative Budget Board and the governor on the effectiveness of the program.

This report details the administration of the competitive grant program and provides information about cost savings for students from the use of OER by faculty grantees, as well as the number of students served by the first, second, and third rounds of grants (awarded in 2018, 2020, and 2023, respectively). The second round of grants in 2020 used appropriations allocated for the OER Grant Program during the 86th Texas Legislature. Additional funding in the amount of \$212,049 was appropriated by the 87th Texas Legislature in 2021. The third round of grants was released in early 2023 and executed in summer 2023. A request for applications for the fourth round of grants will be released in fall 2024.

Introduction

An “open educational resource” is defined in Texas Education Code (TEC), Section 51.451, as “a teaching, learning, or research resource that is in the public domain or has been released under an intellectual property license that permits the free use, adaptation, and redistribution of the resource by any person. The term may include full course curricula, course materials, modules, textbooks, media, assessments, software, and any other tools, materials, or techniques, whether digital or otherwise, used to support access to knowledge.” Open educational resources (OER) are usually free or offered at a low cost for students.

Consumer prices for college textbooks increased 40.6% from July 2011 to March 2018. Textbook costs decreased steadily between March 2018 and January 2020 but have increased since January 2020 (BLS, 2021). A report by the College Board states that students at four-year institutions spend an average of \$1,250 for course materials and other supplies (Ma and Pender, 2023). Students try to reduce textbook costs by buying used copies, sharing materials with classmates, using earlier editions, and finding a library copy (Pennsylvania Course Materials Survey, 2023). Faculty in a recent study agreed that students were a driving force and the main priority behind adopting OER (Smith et al., 2023).

Seaman and Seaman (2023) conducted a study of faculty and administrators from U.S. higher education institutions, concluding that OER awareness and its use has increased to the highest levels recorded in prior studies. Potential factors influencing the rise include concerns about the costs of materials and faculty being more comfortable using digital materials following their pandemic experiences. The COVID-19 pandemic spotlighted the importance of quality, reasonably priced, digital educational materials, as courses across the country transitioned to remote learning. From March 2020 into the fall 2020 semester, institutions experienced “large-scale digital materials adoption” (Seaman and Seaman, 2021, p. 25).

In a study of how institutions across the United States rapidly shifted from in-person to online delivery, Johnson et al. (2021) stated that within higher education, “these techniques created a sense of optimism towards digital materials in their instruction post-pandemic. For instance, more faculty are now familiar with incorporating video, digital materials, and OER into any mode of course delivery” (p. 7). In contrast to these findings, Elder and Alam (2023) surveyed instructors at a public research university in the United States and identified a disconnect between awareness of OER and the actual adoption of OER for courses. They also concluded that participants indicated a lack of a strong understanding of what OER are and the difference between OER and free online course materials.

Use of OER can lead to significant cost savings for students. For example, the University System of Georgia's Affordable Learning Georgia program projects that since its inception, it has saved students over \$173 million in textbook costs (Affordable Learning Georgia, 2024). The Maryland Open Source Textbook (M.O.S.T.) initiative estimates that students impacted by M.O.S.T. saved an average of \$137 per course and an estimated \$22.9 million in cumulative textbook costs savings (2024). In a 2021 report, the U.S. Public Interest Research Groups Education Fund reported that in fall 2020, “65 percent of students surveyed reported skipping buying a textbook because of cost; 63 percent skipped purchasing one during the same period the previous year” (Nagle and Vitez, 2021, p. 8).

In 2017, the 85th Texas Legislature passed Senate Bill 810, which created the OER Grant Program to incentivize faculty at Texas institutions of higher education to adopt, modify, redesign, or develop courses that use only OER. The OER Grant Program has saved students an estimated \$2 million in course materials across its three grant-cycle reporting periods. Beyond cost savings, OER are an accessible and affordable option, and the OER Grant Program facilitates OER use and adoption by Texas students and

faculty. This report compiles data on student impact and cost savings from the first three rounds of the Texas OER Grant Program (2018, 2020, and 2023).

Program Development

Rules for the OER Grant Program were established using the Texas Higher Education Coordinating Board's (THECB's) negotiated rulemaking process with input from stakeholders, including representatives from public universities, community colleges, and Texas state technical colleges. Following the negotiated rulemaking process, the THECB adopted rules for the program in February 2018. Rules were codified in the Texas Administrative Code (TAC), Title 19, Part 1, Chapter 4, Subchapter O. Texas Education Code, Section 61.0668, which defined the OER Grant Program, expired on September 1, 2021. The expired legislation identified faculty employed by Texas public institutions of higher education as eligible applicants for grant funds. With stakeholder input through negotiated rulemaking, THECB proposed amendments to TAC, Title 19, Part 1, Chapter 4, Subchapter O, to remove grant administration for individual faculty members by having public institutions of higher education serve as eligible applicants and fiscal agents for OER Grants. The [new rules](#) were adopted by the board of the THECB on October 27, 2022.

The THECB administers the OER Grant Program through a competitive grant application process. For Fiscal Years (FYs) 2018 and 2019, the 85th Texas Legislature appropriated \$200,000 for the program (including one full-time equivalent for administration), and 15 faculty members were awarded grants. The 86th Texas Legislature appropriated additional funding of \$212,049 for grants to be made in FYs 2020 and 2021, and 20 grants were awarded in October 2020. Faculty members that adopt, modify, redesign, or develop OER for their course(s) under the program are required to offer those materials at no cost to students (other than the cost of printing, should students choose to print the materials), and the course must be taught four times within the grant period.

In the 2018 grant period, eligible courses were restricted to courses within the Texas Core Curriculum (TCC). For FYs 2020 and 2021, grants were categorized as Development Grants or Implementation Grants. Development Grants were awarded to faculty or teams of faculty to develop new OER or substantially improve existing OER for two or more high-enrollment TCC courses that account for most credits transferred among institutions. Implementation Grants were awarded to faculty or teams of faculty to support the substantial redesign of one or more TCC courses to incorporate OER resources. Round 2 grantees submitted interim reports to the THECB in December 2021 and December 2022. Round 2 grantees submitted final project reports in September 2023.

In 2021, the 87th Texas Legislature appropriated \$212,049 for the 2022-2023 biennium to the OER Grant Program. For FYs 2022 and 2023, 16 grants were awarded to institutions, with faculty leading the work. Awards were given for both Development and Implementation Grants. Development Grants were awarded to institutions to develop new OER or substantially improve existing OER for one or more courses. Implementation Grants were awarded to institutions to support the substantial redesign of one or more courses to incorporate existing OER. Grants were awarded for academic lower-division and academic upper-division courses leading to credentials of value, with priority given to the development of full-course curricula and to courses from the Workforce Education Course Manual leading to credentials of value that correspond to high-need occupations. Round 3 grantees' first interim reports were submitted in December 2023. The request for applications for Round 4 will be released in fall 2024.

Review, Assessment, and Selection Process

Fiscal Years 2018-2019

The OER Grant Program is a competitive grant, and applications are reviewed by expert reviewers. To assist in the selection process during FYs 2018 and 2019, the THECB called for Texas public institutions of higher education to nominate faculty members who had the expertise to teach lower-division undergraduate courses offered within the TCC and/or were experts in the use of OER. Three expert reviewers evaluated each application, as required by TAC, Title 19, Rule 4.236.

Proposals were assessed based on criteria described in the request for applications (RFA), including the strength of the project design, the alignment to project goals, and the likelihood for success of the expected outcomes. Priority points were assigned in the 2018 round for applications that proposed to adopt, modify, or design OER for courses in the general education *Academic Course Guide Manual* or equivalent core curriculum courses with proven substantial enrollments offered on a recurring semester basis. The THECB staff compiled the assessment results and made final award selections, per TAC, Title 19, Rule 1.16.

Fiscal Years 2020-2021

The selection process for FYs 2020 and 2021 was similar to that of FYs 2018 and 2019, involving three external, expert reviewers. Reviewers were required to teach or have the expertise to teach lower-division undergraduate courses offered within the TCC or were experts in the use of OER.

The THECB awarded two categories of grant awards under this RFA, Development Grants and Implementation Grants. Development Grants awarded a maximum of \$25,000 to faculty or teams of faculty to develop new OER or substantially improve existing OER for one or more high-enrollment TCC courses. These grants were matched with support from the institution employing that faculty member or faculty team. Implementation Grants awarded a maximum of \$5,000 to faculty or faculty teams to support the substantial redesign of one or more TCC courses to incorporate OER resources.

Proposals were assessed based on criteria described in the RFA, including the strength of the project design, the alignment to project goals, and the likelihood for success of the expected outcomes. Priority points were assigned in the 2020 round for applications that proposed to redesign a course or courses with high transfer rates. Courses in the state with the highest transfer rates since 2017 were determined using data reported to the THECB by institutions and the THECB Approved Core Course Inventory. A list of eligible courses was available to applicants on the OER Grant Program website.

For Development Grants, an applicant who proposed cross-institutional collaboration received up to five additional points during the application evaluation. The THECB staff compiled the assessment results and made final award selections, per TAC, Title 19, Rule 1.16.

Fiscal Years 2022-2023

The selection process for FYs 2022 and 2023 was similar to that of FYs 2018 and 2019, and FYs 2020 and 2021, involving three external, qualified reviewers. Reviewers were faculty, librarians, and instructional designers with knowledge and experience in the use, adoption, or creation of open educational resources.

THECB awarded two categories of grants to institutions under this RFA, with faculty leading the work: Development Grants and Implementation Grants. Development Grants awarded a maximum of \$25,000 to institutions to develop new OER or substantially improve existing OER for one or more courses. Development Grant applications also included a plan for including faculty from at least one other Texas public institution as contributors or peer reviewers. These grants were matched with support from the institution. Implementation Grants awarded a maximum of \$5,000 to institutions to support the substantial redesign of one or more courses to incorporate existing OER.

Proposals were assessed based on criteria described in the RFA, including the strength of the project design, the alignment to project goals, and the likelihood for success of the expected outcomes. Priority points were assigned in the 2023 round to Development and Implementation Grants. For both grant categories, five priority points were given to applicants that proposed projects that incorporated student participation in the creation, adaptation, or evaluation of the resource(s).

For Development Grants, priority points were given in three additional priority funding areas, with each area awarded five additional points:

- Priority Funding Area 1 awarded additional points to applicants that proposed to develop full course curricula.
- Priority Funding Area 2 awarded additional points to applicants who proposed projects that developed materials for the following courses in the Academic Course Guide Manual: PSYC 2314, BIOL 2420/2320+2120, BIOL 1322/HECO 1322, ENGL 2311, CHEM 1405, CHEM 1305, CHEM 1105, SOCI 2319, or HUMA 2319.
- Priority Funding Area 3 awarded additional points to applicants that proposed cross-institutional collaboration.

THECB staff compiled the assessment results and final award selections, per TAC, Title 19, Rule 1.16.

Grant Awards

Fiscal Years 2018-2019

In FYs 2018 and 2019, 41 eligible applications were received for the OER Grant Program. Grant awards in the total amount of \$152,000 were made to 15 faculty members at Texas public institutions of higher education. Faculty members who proposed to adopt, modify, redesign, or create one course using only open educational materials received \$8,000, and faculty members who proposed to adopt, modify, redesign, or create multiple courses received \$16,000. Materials developed under the OER Grant Program have been uploaded to the statewide OER repository, OERTX.

Table 1 provides information about the 15 awards that ended in August 2021. Course(s) funded by the OER Grant Program were taught four times during the grant cycle using only OER.

Table 1. OER Grant Program Fiscal Years 2018-2019 Awardees

| Faculty Name | Institution | Course(s) | Grant Amount |
|------------------------------|----------------------------------|--|--------------|
| Karl Aho | Tarleton State University | Introduction to Philosophy | \$8,000 |
| Veronica Amaku | Houston Community College | General Biology for Majors | \$8,000 |
| Megan Collins | Prairie View A&M University | Social Problems | \$8,000 |
| Brandi Falley | Texas Woman's University | Elementary Statistics I & II | \$16,000 |
| Brittney Gillespie-Porter | Texas Southmost College | College Algebra | \$8,000 |
| Richard Gosselin | Houston Community College | Introduction to Macroeconomics, Introduction to Microeconomics | \$16,000 |
| Joseph Locke | University of Houston – Victoria | U.S. History II | \$8,000 |
| Katherine Oser | Central Texas College | Introduction to Computing | \$8,000 |
| Lamont Rodgers | Houston Community College | Introduction to Symbolic Logic | \$8,000 |
| Amy Petros | University of North Texas | General Chemistry for Majors I & II | \$16,000 |
| India Stewart | Eastfield College | Introduction to Sociology | \$8,000 |
| Laura Villarreal | Texas Southmost College | Mathematics for Teachers | \$8,000 |
| Virginia Villarreal Disraeli | Austin Community College | British Literature | \$8,000 |

| Faculty Name | Institution | Course(s) | Grant Amount |
|---------------|-----------------------------------|----------------------------|------------------|
| Nicholas Webb | McLennan Community College | English Composition I & II | \$16,000 |
| Ben Wright | The University of Texas at Dallas | U.S. History I | \$8,000 |
| Total | | | \$152,000 |

Fiscal Years 2020-2021

In FYs 2020 and 2021, 45 eligible applications were received for the OER Grant Program. Faculty members or teams were awarded a maximum of \$5,000 for Implementation Grants and a maximum of \$25,000 for Development Grants. In all, 20 grant awards totaling \$208,620 were awarded, 6 Development Grants and 14 Implementation Grants, to faculty members at Texas public institutions of higher education. Materials developed under the OER Grant Program were uploaded to the statewide OER repository, OERTX, in June 2021.

Table 2 provides information about the 20 awards that ended in August 2023. Course(s) funded by the OER Grant Program were taught four times during the grant cycle using only OER.

Table 2. OER Grant Program Fiscal Years 2020-2021 Awardees

| Faculty Name | Institution | Course(s) | Grant Amount |
|---------------------------------|--------------------------------------|---|------------------|
| Sarah Alvanipour | Houston Community College | General Chemistry | \$24,624 |
| Brenda Norton | Angelo State University | Texas Government | \$21,474 |
| Fred Spaulding | Tarrant County Community College | Art Appreciation | \$25,000 |
| Jesse Taylor | Angelo State University | Finite Mathematics | \$22,137 |
| Erika M. Warnick | South Plains College | English Composition | \$20,500 |
| Adam Weiss | West Texas A&M University | Learning Frameworks, Educational Foundations | \$25,000 |
| Total Development Grants | | | \$138,735 |
| Kimberley Breuer | The University of Texas at Arlington | Technology and Science in American Society | \$5,000 |
| Billye Cheek * | Grayson College | College Algebra, General Chemistry, Organic Chemistry | \$5,000 |
| Jangsup Choi | Texas A&M University – Commerce | United States Government | \$5,000 |
| Wade A. Cornelius | El Paso Community College | Public Speaking and Professional Communication | \$5,000 |

| Faculty Name | Institution | Course(s) | Grant Amount |
|---------------------------------------|--------------------------------------|---------------------------------|------------------|
| Molly Wiant Cummins | The University of Texas at Arlington | Fundamentals of Public Speaking | \$5,000 |
| Jerrica Jordan | Tarrant County Community College | English Composition | \$4,936 |
| Minchul Kang | Texas A&M University–Commerce | Calculus I and II | \$5,000 |
| Maura L. Krestar | Texas A&M University–Kingsville | Introduction to Psychology | \$5,000 |
| Ming Lou | Lamar University | College Physics II | \$5,000 |
| Rajone Lyman | Houston Community College | Learning Frameworks | \$5,000 |
| Kristi Moore | Angelo State University | General Psychology | \$4,949 |
| Creshema Murray | University of Houston–Downtown | Introduction to Communication | \$5,000 |
| Sadaf Sajjad | Austin Community College | Introduction to Psychology | \$5,000 |
| Anthony Zoccolillo | Texas A&M University–Corpus Christi | General Psychology | \$5,000 |
| Total Implementation Grants | | | \$69,885 |
| Total OER Grant Program Grants | | | \$208,620 |

**Grant was terminated, as requested by grantee. Institution adopted Inclusive Access Program, and therefore the use of OER was no longer possible.*

Fiscal Years 2022-2023

In FYs 2022 and 2023, 19 eligible applications were received for the OER Grant Program. Institutions were awarded a maximum of \$5,000 for Implementation Grants and a maximum of \$25,000 for Development Grants. In all, 16 grant awards totaling \$184,958 were awarded, 7 Development Grants and 9 Implementation Grants, to Texas public institutions of higher education. Materials developed under the OER Grant Program were uploaded to the statewide OER repository, OERTX, in September 2023.

Table 3 provides information about the 16 awards, which will continue through August 31, 2025. Course(s) funded by the OER Grant Program will be taught four times during the grant cycle using only OER.

Table 3. OER Grant Program Fiscal Years 2022-2023 Awardees

| Institution | Course(s) | Grant Amount |
|--|--|------------------|
| North Central Texas College | Microbiology | \$9,000 |
| Laredo College | Federal Government | \$25,000 |
| San Jacinto College | Introductory Chemistry | \$18,658 |
| Odessa College | Lifespan Growth and Development American Minority Studies | \$25,000 |
| Texas Tech University Health Sciences Center | International Health | \$25,000 |
| Midwestern State University | College Algebra Developmental College Algebra | \$12,300 |
| The University of Texas at San Antonio | Telecommunications and Networking | \$25,000 |
| Total Development Grants | | \$139,958 |
| The University of Texas at Tyler | Foundations of Leadership | \$5,000 |
| North Central Texas College | World Literature I Learning Framework Introduction to Ethics Music Appreciation | \$5,000 |
| Central Texas College | College Algebra | \$5,000 |
| Tarrant County College District | Computed Tomography | \$5,000 |
| West Texas A&M University | Statistics for Business and Economics | \$5,000 |
| Austin Community College District | Introduction to the Teaching Profession | \$5,000 |
| Austin Community College District | Educating Young Children | \$5,000 |
| Lee College | Introduction to Physical Fitness and Wellness | \$5,000 |
| Texas Woman’s University | Composition I/Integrated Reading and Writing | \$5,000 |
| Total Implementation Grants | | \$45,000 |
| Total OER Grant Program Grants | | \$184,958 |

Data from Grantee Progress Reports

The 15 faculty members awarded grants in the 2018 round of the OER Grant Program completed their first progress reports in December 2019, second progress reports in October 2020, and a final report in September 2021. The 20 faculty members awarded grants in the 2020 round of the OER Grant Program submitted their first progress reports to the THECB in December 2021 and second progress reports in December 2022.

Many of the 2018 awardees taught the course(s) using only OER for the first time during the fall 2019 term. Grantees reported for the spring 2020, summer 2020, fall 2020, spring 2021, and summer 2021 terms during the grant period. An estimated total of 6,918 students completed courses during this time using only OER adopted, modified, redesigned, or developed under the program, for a total estimated savings to students of \$1,014,416. This estimate includes students who took courses with faculty members other than the grantees (at the same institution) who also used the OER adopted, modified, redesigned, or developed under the grant program.

Awardees for the 2020 round of the OER Grant Program began teaching using OER in their courses in fall 2020. An estimated total of 8,727 students completed courses using OER from the grant program between fall 2020 and fall 2023, with an estimated savings of \$882,255.

Awardees for the 2023 round of the OER Grant Program began teaching using their OER in courses in fall 2023. The first progress report for the 2023 round, with student impact and estimated cost savings data, was submitted to the THECB in December 2023. An estimated total of 1,540 students completed courses using OER from the grant projects, with an estimated savings of \$105,573.

Table 4 provides information about the 2018 grantee outcomes for students served and money saved. As noted above, the grantees' colleagues may also be using OER created or curated for the grant program.

Table 4. OER Grant Program Fiscal 2018-2019 Award Impact

| Term | # of Students Served by Grantee Faculty Member and Colleagues | Total Amount Saved by Students During the Term* |
|--------------|---|---|
| Fall 2019 | 1,487 | \$237,387 |
| Spring 2020 | 1,502 | \$251,109 |
| Summer 2020 | 427 | \$34,635 |
| Fall 2020 | 1,502 | \$251,109 |
| Spring 2021 | 1,846 | \$226,907 |
| Summer 2021 | 154 | \$13,269 |
| Total | 6,918 | \$1,014,416 |

Source: OER Grant Program Progress Reports

*Amount saved based on the number of students completing the course and the cost of course materials in the semester preceding OER use. Material costs ranged from \$43 to \$413 per student, per course.

Table 5 provides information about the 2020 grantee outcomes for students served and money saved. Two grantees requested and were granted a six-month no-cost grant extension, as allowed in the request for applications. Therefore, courses using OER from the grant projects were offered in spring 2023, summer 2023, and fall 2023.

Table 5. OER Grant Program Fiscal 2020-2021 Award Impact

| Term | # of Students Served by Grantee Faculty Member and Colleagues | Total Amount Saved by Students During the Term* |
|--------------|---|---|
| Fall 2020 | 534 | \$50,010 |
| Spring 2021 | 625 | \$71,246 |
| Summer 2021 | 381 | \$35,021 |
| Fall 2021 | 2,404 | \$240,588 |
| Spring 2022 | 1,694 | \$184,156 |
| Summer 2022 | 369 | \$33,311 |
| Fall 2022 | 391 | \$54,602 |
| Spring 2023 | 1,619 | \$140,416 |
| Summer 2023 | 478 | \$36,826 |
| Fall 2023 | 232 | \$36,079 |
| Total | 8,727 | \$882,255 |

Source: OER Grant Program Progress Reports

*Amount saved based on the number of students completing the course and the cost of course materials in the semester preceding OER use. Material costs ranged from \$19 to \$306 per student, per course. Cost savings have been updated since October 2023 legislative report, based on updated numbers submitted by grantees.

Table 6 provides information about the 2023 grantee outcomes for students served and money saved.

Table 6. OER Grant Program Fiscal 2022-2023 Award Impact

| Term* | # of Students Served by Grantee Faculty Member and Colleagues | Total Amount Saved by Students During the Term** |
|--------------|---|--|
| Fall 2023 | 1,540 | \$105,573 |
| Total | 1,540 | \$105,573 |

Source: OER Grant Program Progress Reports

*Round 3 Grantees taught courses using OER from the grant project for the first time in fall 2023.

**Amount saved based on the number of students completing the course and the cost of course materials in the semester preceding OER use. Material costs ranged from \$40 to \$304 per student, per course.

Possible Future OER Opportunities

Per TEC 61.0668, which provided initial guidelines for reporting on the OER Grant Program, this report includes suggestions of subject areas that would benefit from the adoption, modification, or development of OER and options for future steps for adopting, modifying, or developing OER.

Subject Areas

In 2019, 2021, and 2023, the THECB partnered with the Digital Higher Education Consortium of Texas (DigiTex) and the Institute for the Study of Knowledge Management in Education (ISKME) to conduct landscape surveys of OER use and adoption at Texas institutions of higher education. A recommendation for subject areas to target for OER adoption was included in the survey reports. The results of the third biennial OER landscape survey are being finalized.

The 2021 survey was administered to all 158 two- and four-year public and private institutions across the state, as well as the 11 health-related institutions. Growth in commitment to OER across the state is documented in the 2021 survey, with 45% of institutions having formal policies or programs in place to support OER, compared with 38% reported in 2019 (Jimes, C., et al., 2021). The report suggested the curation of OER in career and technical education, especially as those courses could be leveraged to support zero-textbook cost credentials in those fields (Jimes, C., et al., 2019). In the future, the OER Grant Program could be targeted to TCC and workforce courses (or other transferable, high-enrollment courses), where few resources currently exist, to have the widest impact possible.

The strategic plan for higher education, [*Building a Talent Strong Texas*](#), provided the guiding framework for identifying courses that lead to postsecondary credentials of value. OER aligned with these courses supports the broader mission and goals of the plan. As noted in *Building a Talent Strong Texas*, "Containing costs and increasing value for students and Texas taxpayers is a shared responsibility among the Texas Legislature (which funds higher education), institutional leaders (who set tuition and create educational pathways to credentials), and students (who choose their paths to completion)" (p. 10). Findings from the 2019 OER Landscape study validate the work focusing on supporting resources in high-demand fields (Jines, C. et al. 2019). The emphasis on credentials of value awarded in high-demand fields also supports the goals of [Texas House Bill 8](#), 88th Texas Legislature.

The lack of openly licensed ancillary materials can be challenging for faculty. In 2022, the THECB Division of Digital Learning (DDL) partnered with ISKME and completed an analysis to identify "free, openly licensed full courses and textbooks for 25 highly transferable, high-enrollment courses required for two-year or four-year degree paths in high-wage/high-demand fields" (Burns, S. et al., 2022, p. i). The findings from the high-impact course research suggest the need for peer review best practices, a listing of the kinds of reviews that have been completed for OERTX resources, and a requirement that OER Grant Program grantees complete peer reviews for adopted OER (Burns, S. et al. 2022).

Using data from the Texas Workforce Commission, researchers identified high-demand fields and selected multiple degree paths in these fields for the analysis, including nursing, business, accounting, computer science, engineering, and health administration. The analysis focused primarily on TCC courses and revealed the need for full OER courses for U.S. History II and Introduction to Philosophy and lab ancillaries for science courses, for example. In response to the analysis, the THECB and ISKME developed a [High-Impact Course Resources Hub](#) to identify and organize high-quality, open materials for teaching high-impact courses. The hub includes more than 20 collections of 250 openly licensed resources that align with the following categories of the Texas Core Curriculum: American History;

Communication; Government and Political Science; Language, Philosophy, and Culture; Life and Physical Sciences; Math, and Social and Behavioral Sciences.

The THECB partnered with OpenStax at Rice University, which is a well-known publisher of high-quality, peer-reviewed, openly licensed college textbooks that are free to use. The THECB and OpenStax worked with nursing educators and institutional administrators to design and develop OER for nursing, based on the new American Association of Colleges of Nursing (AACN) *Essentials* curriculum as part of the OER Nursing Essentials (ONE) Project. In 2021, AACN led the restructuring of domains, competencies, and subcompetencies for various levels of nursing practice. This new competency-based curriculum will impact the way nursing courses are taught in Texas and across the nation. Materials for nursing courses, including textbooks and ancillaries, are typically very costly for students. Development of OER mapped to the AACN *Essentials* curriculum could decrease costs for students in a high-need field and allow instructors access to adaptable materials designed to directly address emerging methods of instruction and evaluation, as well as provide for course content.

In February 2024, the THECB and OpenStax partnered to host the virtual Open Nursing Education Summit featuring presentations by authors and peer reviewers of the resources. Materials and session recordings from the conference are available in the [OER Nursing Essentials Hub](#) on OERTX. Eight textbooks developed as part of the project are also available on the hub for faculty adoption. OERTX is measuring faculty use and engagement with the resources as the titles are adopted into curriculum.

There is the potential to use the [ONE Project Model](#) for the creation of OER in other high-need disciplines, such as teacher preparation and STEM courses. Steps would include three phases: 1) Discovery (landscape analysis of OER needs and collaboration with stakeholders); 2) Planning (identifying existing OER, mapping curriculum, determining what needs to be created and by whom); and 3) Implementation (peer review process to ensure the quality and relevancy of the content and OER publication). Future subject areas will also include supporting OER beyond course materials, such as addressing needs for students as they enter the workforce, such as micro credentials, digital information literacy, and artificial intelligence.

Future Steps

In 2017 and 2018, the THECB conducted a study on the feasibility of creating a digital repository for OER in Texas, and in 2019, 2021 and 2023 the agency conducted the landscape surveys mentioned above. The links for 2019 and 2021 reports can be found in the [References](#) section of this report. Several recommendations came out of these studies that will inform future programs and initiatives for increasing OER awareness, adoption, and use in Texas. The findings from the 2023 research will be released in summer 2024.

Governor Greg Abbott announced in 2020 that the State of Texas would invest \$175 million in Governor's Emergency Education Relief (GEER) funding in higher education, originating from the U.S. Department of Education's administration of the Education Stabilization Fund in the Coronavirus Aid, Relief, and Economic Security Act of 2020. A portion of this funding was dedicated to digital learning support, including OER initiatives, to build on the state's investment in this area.

The THECB launched the Division of Digital Learning (DDL) in November 2020. The DDL sustains existing OER programs and initiatives and will provide direction and support for innovative efforts in the future. Suggestions in this report were developed from the two OER landscape surveys, the experience the THECB now has with statewide OER initiatives as well as lessons learned from national partnerships initiated by the DDL, and the goals and work of the DDL.

Future steps include the following:

1. Continue commitment to state-level OER advocacy and collaboration with key stakeholders.

States that have documented success in expanding OER use and adoption employ an ecosystem approach (Huttner et al., 2018). This includes collaborating with stakeholders such as student government, bookstores, support services, librarians, administrators, and instructional designers, as well as partnering with known experts in the field of open education. In addition to partnerships noted in other sections of this report, the THECB collaborated with the DigiTex and the Texas Digital Library to organize the “Open Texas” OER conferences in 2021 and 2022. The THECB, in partnership with Texas Digital Library, will continue to advance OER and collaborate with stakeholders by supporting the 2024 [Open Texas](#) conference, and sponsoring additional conferences and trainings. The theme for the 2024 Open Texas conference is “Global Horizons of Open Education: The View from Texas.” Niki Whiteside, Assistant Vice Chancellor for Instructional Innovation and Support, San Jacinto College, and Dr. Tonja Conerly, Professor of Sociology, San Jacinto College, will serve as conference co-chairs in 2024. Over 1,000 individuals from around the world registered for the first Open Texas conference in 2021.

The THECB collaborates with organizations and institutions at the state and national levels to stay informed about developments in the open education landscape. DDL staff are also invited to serve as keynote speakers, panelists, and workshop leaders for OER-focused conferences and community events. These opportunities provide spaces for open education advocates to network, collaborate, learn, and help fortify and enrich the Texas OER community. Topics include DDL OER initiatives and strategies for advancing OER. Currently, the DDL is collaborating with the Driving OER Sustainability for Student Success (DOERS3) Collaborative, a group of 36 public higher education systems and statewide/provincewide organizations working to support student success by promoting access to free, customized OER. The DDL participation in DOERS3 includes serving on the research subgroup and drafting data definitions for OER research across states and systems to assist with data collection and impact information.

Given the increased scope and visibility of THECB's work in open education in the past five years, the formation of an advisory council is increasingly relevant. This body could be formed as a subcommittee of the Learning Technology Advisory Committee or as a separate group to provide feedback on planned OER projects; facilitate lines of communication with institutions, organizations, and other entities (such as K-12 schools) working in the open education space; and help to inform future directions of the THECB. Several states, including Connecticut and Colorado, have used such a model with great success.

2. Promote institutional capacity building through robust digital resources and innovative programs.

In the 2021 OER landscape study, the authors suggested developing an OER playbook, or guidebook, to support institutions as they build capacity and drive systemic change. The playbook would be focused on providing resources for institutions as they develop cross-office support, engage students and faculty as agents of change, and create external partnerships to advance OER. In addition, the landscape survey identified a need for increased training and understanding of open licensing policies (Jimes, C., et al., 2021).

To directly address this stakeholder need, the DDL released the *OER in Texas Statewide Playbook* in March 2023. The playbook includes the following units for developing knowledge and skills: The Foundations of Open Education and its History in Texas, Building on the Basics of OER and the Texas Foundation for Open, and Working Toward a Sustainable OER Future. Because the playbook is

openly licensed, institutions can use and adapt the content. For those new to OER, the playbook includes foundational information about OER and examples of exemplary work being done by OER stakeholders and institutions. To scale use of the *OER in Texas Statewide Playbook*, the DDL in partnership with ISKME, offered a Texas OER Playbook Academy in summer 2023, which included sessions for each of the playbook units. The THECB continues to promote the use of the playbook through additional academies and the creation of [on-demand supplemental lessons](#) for supporting integration of its lessons at institutions.

The DDL is developing a Texas OER Fellowship program. The inaugural fellowship cohort will include a small group of open education leaders who will contribute to the program design, curriculum development, and serve as mentors for future fellows. Future cohorts of OER Fellows will create a strategic plan for open education leadership development based on research, create promotional resources for advancing open education, work as leaders and advocates throughout the state and at their institutions, and develop and complete a capstone project. The *OER in Texas Statewide Playbook* includes content about how to develop support for OER at the institutional level, strategies for developing policies and guidelines, developing collaboration with stakeholders, and building a culture of open education campuswide and will be used as a key resource for the Texas OER Fellowship Program.

3. Increase THECB-sponsored OER professional development and community engagement opportunities.

Both landscape surveys pointed to the need for increased faculty training in adoption and use of OER. Individual faculty members are often the decision-makers when it comes to the educational materials used in the courses they teach (Seaman & Seaman, 2017). A national study found that faculty cited trouble finding OER materials, quality of available OER materials, and lack of institutional support as significant reasons for not adopting OER (Seaman & Seaman, 2021). Only 18% of faculty noted providing OER in the fall 2020 term, despite the need for accessible digital materials during the pandemic pivot to remote learning. Even though respondents indicated an increased awareness of OER from previous years, adoption of OER did not increase. According to open resource advocacy organization SPARC, “expanding OER at institutions can be as simple as offering encouragement and support for the use and sharing of high-quality materials academics create” (SPARC, 2024a, p. 2).

The 86th Texas Legislature mandated a repository for OER, customized for Texas institutions of higher education, with House Bill 3652. All grantees are required to make their work available on the statewide OER repository, OERTX, which launched September 1, 2020. The Legislature allocated funds for OERTX for FYs 2020 and 2021, and the General Appropriation Acts of 2021 and 2023 dedicated additional resources for ongoing maintenance, support, and expansion. As of early 2023, OERTX had over 510,000 users, over 12,000 resources have been added to the repository, and over 3,000 resources have been created using the Open Author tool. In 2022, Open Education Global awarded the DDL the Open Policy Award for its work building and supporting OERTX, and the Texas Legislature recognized DDL with a resolution on April 11, 2023, illustrating the success and broad impact of the repository.

The DDL continues to offer professional development opportunities that build community and support open education, such as learning networks and conferences. In February 2024, as previously noted, the DDL partnered with OpenStax at Rice University and presented the Open Nursing Education (ONE) Summit. The summit was a first look at eight peer-reviewed, freely available nursing textbooks. Over 1,200 attendees registered for the event and explored how the openly licensed resources can be adapted at their institutions. To expand access to professional

development on OER, the DDL supports community engagement opportunities, such as learning networks and conferences. The DDL sponsored Digital Learning Summits in July 2022 and September 2023. The fall 2023 conference focused on micro credentials and showcased the work of the Micro-Credentials Learning Network. The DDL is currently planning a Digital Learning Summit for April 2025.

The DDL launched an online self-paced professional development program on OER in August of 2023. The [Texas OER Core Elements Course](#) is available from the OERTX repository and provides a certificate of completion for individuals who complete a final assessment. Since the launch of the online course, 24 individuals from five institutions across the state have completed the course. The DDL will continue to promote the Texas OER Core Elements course. For example, future OER Grant Program grantees will complete the training as a grant deliverable.

In November 2023, DDL partnered with OpenStax, the Open Texas Conference planning committee, and THECB colleagues to celebrate Texas Digital Learning Week. Sessions, which provided opportunities for networking, included an opening session from DDL Assistant Commissioner Dr. Michelle Singh, a panel discussion about adapting to innovation, and a dive into new OERTX resources. In March 2024, the DDL celebrated Open Education Week with a series of sessions that focused on the innovative OER research conducted by the THECB, an OER Grant Program grantee panel, and the OER Nursing Essentials Project.

The most notable barrier to the adoption of OER, according to a national 2016 survey, was that faculty found it difficult to find materials they needed (Seaman & Seaman, 2017). OERTX also offers hubs where individual institutions can curate OER content specific to the needs of faculty and students, and groups that can be created by users around a particular content area or topic. DDL will continue to support institutions and OER users in using these tools more effectively within OERTX to facilitate collaboration, effectively curate content, and share best practices across the state.

4. Continue to highlight exemplary work being done at institutions.

The THECB is in a unique position to bring attention to Texas institutions and faculty already striving for excellence in OER use. Inviting faculty and administrators to serve as guest speakers or facilitators for webinars, highlighting best practices through OERTX, and awarding commendable projects with grant funding are ways the THECB spotlights these exemplars. For example, in March 2024, the DDL celebrated Open Education Week by sponsoring programming throughout the week. One session included OER Grant Program grantees from each of the three grant rounds. OER grantees served as panelists and shared what first inspired them to use OER, the impact of OER on faculty teaching and student learning, how to continuously improve resources, how their use of OER evolved across the grant cycle, how to secure support for OER work, and the amount of time required for developing OER.

5. Looking to the future of the open ecosystem.

The DDL is continuously studying developments in open education. The OER landscape will continue to change based on emerging technologies such as artificial intelligence, Department of Education negotiated rulemaking, and inclusive and equitable access models. In 2024, the Department of Education proposed the elimination of a provision that requires institutions to secure authorization from students for books and supplies, rather than automatically billing them for books and supplies (SPARC, 2024b). As revealed in the 2023 OER Landscape Survey, institutions are using OER to some extent, and the DDL will continue to contribute to how OER can be adopted and adapted beyond course materials.

The third landscape survey examines institutional engagement in automatic textbook billing models for the delivery of course materials, such as inclusive access and equitable access programs. For example, an institution employing an equitable access program may set a flat fee for course materials per semester hour for each student, which could include use of both OER and traditional, copyrighted materials. Textbook pricing and purchasing are completed at the institutional level, but students are given an option to opt out of the fee. Additional research can help determine the reach and impact of these models in Texas.

The THECB is also working to capitalize on future possibilities for collaboration and adaptation, inherent in the principles of open education, to scale institutional best practices beyond sharing instructional materials. Future use of a grant management system will allow for collection and automation of grant impact. The addition of two hubs in OERTX illustrates that the digital repository can be used to support open education beyond instruction. Collaborating with agency partners such as the Student Success Division and supporting the Student Success Inventory initiative on OERTX allows users to have free access to best practices, cutting edge research, and collaborative spaces to encourage sharing and adaptation, thereby scaling successful work done by Texas institutions across the state and nation. The THECB will continue to measure the impact of these initiatives on institutional effectiveness and student outcomes and engage in continuous improvement.

The THECB maintains information about the OER Grant Program online at <http://www.highered.texas.gov/oergp>.

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Appendix A: Resources

Digital Information Literacy Hub: <https://oertx.highered.texas.gov/hubs/digitalinfolit>

Driving OER Sustainability for Student Success (DOERS3): <https://www.doers3.org/>

OER Grant Program in statute (TEC, Section 61.0668): <https://statutes.capitol.texas.gov/Docs/ED/htm/ED.61.htm#61.0668>

OERTX Repository: <https://oertx.highered.texas.gov/>

High-Impact Course Resources Hub: <https://oertx.highered.texas.gov/hubs/impact>

OER Nursing Essentials Hub: <https://oertx.highered.texas.gov/hubs/ONE-nursing>

OpenStax: <https://openstax.org/>

Open Texas Conference: <https://www.opentexas.org/>

Rules for the OER Grant Program (TAC, Title 19, Part 1, Chapter 4, Subchapter 0, Rules 4.230-4.238): [https://texreg.sos.state.tx.us/public/readtac\\$ext.ViewTAC?tac_view=5&ti=19&pt=1&ch=4&sch=O&rl=Y](https://texreg.sos.state.tx.us/public/readtac$ext.ViewTAC?tac_view=5&ti=19&pt=1&ch=4&sch=O&rl=Y)

Student Success Program Inventory: <https://oertx.highered.texas.gov/hubs/txstudentsuccess>

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Texas OER Core Elements Course: <https://oertx.highered.texas.gov/courseware/24>

Open Educational Resources (OER) in Texas Statewide Playbook: <https://oertx.highered.texas.gov/courseware/lesson/4146>

Texas OER Regional Needs Analysis: <https://oertx.highered.texas.gov/courseware/lesson/4163>

Texas Higher Education

COORDINATING BOARD

This document is available on the Texas Higher Education Coordinating Board website:
<https://highered.texas.gov>.

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