Open Educational Resources (OER) Grant Program

A Report to the Texas Legislature in accordance with the General Appropriations Act, SB 1, 87th Texas Legislature, Article III, Section 49

October 2023

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Texas Higher Education Coordinating Board

Agency Mission
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.

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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. Reports are required by Rider 49 of the General Appropriations Act, Senate Bill 1, 87th Texas Legislature, Article III-59.

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 and second rounds of grants (awarded in 2018 and 2020, 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. A request for applications for a third round of the OER Grant Program was released in early 2023.

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, yet have increased since January 2020 (BLS, 2021). A recent report by the College Board states that students at four-year institutions spend an average of $1,240 for course materials and other supplies (Ma and Pender 2022). Seaman and Seaman (2022) conducted a study of faculty and administrators from U.S. higher education institutions, investigating their opinions about cost of materials to students, awareness of OER and OER initiatives, and availability of inclusive access. The study revealed that cost to students was a major concern for faculty and administrators, with 86% of administrators and 64% of faculty in the study agreeing that the cost of course materials is a serious problem.

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, Seaman, and Veletsianos (2021) state 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).

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 $143 million in textbook costs (Affordable Learning Georgia, 2023). The Maryland Open Source Textbook (M.O.S.T.) initiative estimates that students impacted by M.O.S.T. saved an average of $138 per course (2023). In a 2021 report, the U.S. Public Interest Research Groups (PIRG)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. Evidence from other states indicates that OER grant programs positively impact students. 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 two rounds of the Texas OER Grant Program (2018 and 2020) and provides preliminary information on the third round (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, 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 the undue burden of grant administration for individual faculty members by having public institutions of higher education serve as eligible applicants and fiscal homes 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. In Fiscal Years (FYs) 2018 and 2019, $200,000 was appropriated for the program (including one full-time equivalent for administration), and 15 faculty members were awarded grants under the OER Grant Program. Additional funding in the amount of $212,049 was appropriated for grants by the 86th Texas Legislature for awards 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 will submit 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 under this grant, 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 report is due December 2023.

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 recommendations for funding to the appropriate deputy commissioner, per TAC, Title 19, Rule 1.16. The deputy commissioner reviewed the information and made the final award selections.

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. THECB staff compiled the assessment results and made recommendations to the appropriate deputy commissioner, per

TAC, Title 19, Rule 1.16. The deputy commissioner reviewed the information and made the final award selections.

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:

1. Priority funding area one awarded additional points to applicants that proposed to develop full course curricula.

2. Priority funding area two 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.

3. Priority funding area three awarded additional points to applicants that proposed cross-institutional collaboration.

THECB staff compiled the assessment results and made recommendations to the appropriate deputy commissioner, per TAC, Title 19, Rule 1.16. The deputy commissioner reviewed the information and made the final award selections.

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

Faculty Name	Institution	Course(s)	Grant Amount
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
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, which will continue through August 31, 2023. Course(s) funded by the OER Grant Program will be 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	$24,624.00
Brenda Norton	Angelo State University	Texas Government	$21,474.00
Fred Spaulding	Tarrant County Community College	Art Appreciation	$25,000.00
Jesse Taylor	Angelo State University	Finite Mathematics	$22,137.00
Erika M. Warnick	South Plains College	English Composition	$20,500.00

Faculty Name	Institution	Course(s)	Grant Amount
Adam Weiss	West Texas A&M University	Learning Frameworks, Educational Foundations	$25,000.00
Total Development Grants			**$138,735.00**
Kimberley Breuer	The University of Texas at Arlington	Technology and Science in American Society	$5,000.00
Billye Cheek *	Grayson College	College Algebra, General Chemistry, Organic Chemistry	$5,000.00
Jangsup Choi	Texas A&M University – Commerce	United States Government	$5,000.00
Wade A. Cornelius	El Paso Community College	Public Speaking and Professional Communication	$5,000.00
Molly Wiant Cummins	The University of Texas at Arlington	Fundamentals of Public Speaking	$5,000.00
Jerrica Jordan	Tarrant County Community College	English Composition	$4,936.00
Minchul Kang	Texas A&M University–Commerce	Calculus I and II	$5,000.00
Maura L. Krestar	Texas A&M University–Kingsville	Introduction to Psychology	$5,000.00
Ming Lou	Lamar University	College Physics II	$5,000.00
Rajone Lyman	Houston Community College	Learning Frameworks	$5,000.00
Kristi Moore	Angelo State University	General Psychology	$4,936.00
Creshema Murray	University of Houston–Downtown	Introduction to Communication	$5,000.00
Sadaf Sajjad	Austin Community College	Introduction to Psychology	$5,000.00
Anthony Zoccolillo	Texas A&M University–Corpus Christi	General Psychology	$5,000.00

Faculty Name	Institution	Course(s)	Grant Amount
Total Implementation Grants			$69,885.00
Total OER Grant Program Grants			$208,620.00

Grant was terminated, as requested by grantee. Institution adopted Inclusive Access Program, and therefore the use of OER is 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 will be 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
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

Institution	Course(s)	Grant Amount
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 6,454 students completed courses using OER from the grant program between fall 2020 and fall 2022, with an estimated savings of $669,724.00.

Awardees for the 2023 round of the OER Grant Program will begin 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, will be submitted to the THECB in December 2023.

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	$237,387.00
Spring 2020	1,502	$251,109.00
Summer 2020	427	$34,635.00
Fall 2020	1,502	$251,109.00
Spring 2021	1,846	$226,907.00
Summer 2021	154	$13,269.00
Total	**6,918**	**$1,014,416.00**

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. As noted above, the grantees' colleagues may also be using OER created or curated for the grant program.

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	$50,010.00
Spring 2021	625	$71.246.00
Summer 2021	381	$35,021.00
Fall 2021	2,404	$240,588.00
Spring 2022	1,694	$184.156.00
Summer 2022	369	$33,311.00
Fall 2022	447	$55,392.00
Total	**6,454**	**$669,724.00**

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 2022 legislative report, based on updated numbers submitted by grantees.

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 open educational resources and options for future steps for adopting, modifying, or developing open educational resources.

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 institutions of higher education in the state. A recommendation for subject areas to target for OER adoption was included in the first two survey reports. The third biennial OER landscape survey was conducted in May 2023, and analysis and report development of the survey results is in development.

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.

While there are often OER textbooks available for many introductory courses, through OpenStax or other publishers, a lack of ancillary materials can be a challenge for faculty. In partnership with ISKME, THECB 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). Most of the courses in the scan were also Texas Core Curriculum courses. The analysis revealed the need for full OER courses for US History II and Introduction to Philosophy and lab ancillaries for science courses, for example.

Based on the analysis, recommendations include supporting establishing a protocol for OER peer review and supporting course updates and ancillary-rich full OER courses for the courses identified as lacking them (Burns, S., et al., 2022). Curation work is currently underway to make available OER materials already available for the 25 courses in OERTX.

THECB is also currently engaged in a partnership 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. THECB and OpenStax are working 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 (O.N.E.) Project. In 2021, AACN led the restructuring of domains, competencies, and sub-

competencies 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. Resources developed as part of the O.N.E. Project will be available for faculty adoption and use in spring 2024. Facilitating access to high-value credentials is a goal of the state's higher education strategic plan, *Building a Talent Strong Texas.*

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 and 2021, the agency conducted the landscape surveys mentioned above. The links for all 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.

Governor Greg Abbott announced in 2020 that the state of Texas would invest $175 million in Governor's Emergency Education Relief 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 Division of Digital Learning.

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, Green, and Cowher, 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 collaborates with the Digital Higher Education Consortium of Texas (DigiTex) and the Texas Digital Library to organize the "Open Texas" OER conference. The first Open Texas conference was held in September 2022 (building on the success of both the 2018 Statewide OER Summit and the 2019 Statewide Open Education Texas Convening). Dr. Rebecca Karoff, Associate Vice Chancellor for Academic Affairs, The University of Texas System, served as conference chair in 2022. Over 1,000 individuals from around the world registered for the first Open Texas conference.

In February 2022, DDL partnered with OpenStax to host Creator Fest: OERTX Edition, a collaborative virtual event focused on OER creation and peer review. In July 2022, the DDL sponsored a Digital Learning Summit. The summit included an OER track and showcased previous OER grantees. The two-day conference included a student panel and sessions about OER creation and implementation. The THECB will continue to advance OER and collaborate with stakeholders by supporting the Open Texas conference in 2024 and sponsoring additional conferences and trainings. These events provide spaces for open education advocates to network, collaborate, and learn, and help to fortify and enrich the Texas OER community.

The THECB also collaborates with organizations and institutions at the state and national levels to stay informed about developments in the open education landscape. The 2018 study funded by the Texas Legislature to investigate the feasibility of developing a statewide OER repository recommended the creation of a statewide OER council, made up of institutional representatives and other OER stakeholders. 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 the Texas OER Playbook.

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 offered a Texas OER Playbook Academy in Summer 2023, in partnership with ISKME, which included sessions for each of the playbook units. THECB plans to continue to promote use of the playbook through additional academies and on-demand options for supporting integration of its lessons at institutions.

3. Increase THECB-sponsored OER professional development opportunities and outreach initiatives.

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 come 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 the use and sharing of high-quality materials academics create" (SPARC, 2021, p. 2).

In partnership with ISKME, THECB sponsored OER Core Elements training sessions for faculty, instructional designers, and librarians interested in using OER in June 2021, October 2021, and April 2023. These sessions offer foundational and advanced content about OER adoption and development, information about open licensing guidelines, and strategies for using OERTX, and provided strategies for continuous improvement of content. Based on the success of that programming, further professional learning opportunities for faculty would likely be welcomed, especially for those at small and rural institutions, where internal expertise may be limited, or institutions may lack bandwidth to provide these services.

The THECB has also partnered with ISKME to offer academies to facilitate use of the OER in Texas Statewide Playbook and launched the OERTX Fellowship Program in 2023. The OERTX Fellowship Program allows participants to develop connections and mentoring relationships and contribute to OER capacity building across the state, which was a recommendation from a THECB research engagement released in March 2023 that used landscape survey data to take an in-depth look at institutional OER policies and programs in the 10 higher education regions of the state.

DDL also held the first Resource for the Resource Retreat in fall 2022, which included a series of workshops for key stakeholders at Texas institutions to build capacity for supporting institutional OER efforts. Such stakeholders included staff in marketing and communication, student affairs, admissions, and university development offices. The 2021 landscape survey noted that institutions that have been most successful in developing OER programs often provide comprehensive, systems-based supports that engage multiple offices and roles on campus. Additional professional development programs directed at encouraging such an approach could facilitate capacity building for OER programs at institutions.

4. Continue OERTX awareness and expansion initiatives.

A repository for OER, customized for Texas institutions of higher education, was mandated by House Bill 3652, 86th Texas Legislature. All grantees are required to make their work available on OERTX, a digital library of OER, which launched September 1, 2020. Funds were allocated to the repository for FYs 2020 and 2021, and additional resources were dedicated for ongoing maintenance, support, and expansion in the General Appropriation Acts of 2021 and 2023. As of early 2023, OERTX had over 370,000 users, over 10,000 resources have been added to the repository, and over 3,000 resources have been created using the Open Author tool. In 2022, the Division of Digital Learning was awarded the Open Policy Award from OE Global for its work building and supporting OERTX, and was recognized by a resolution the of the Texas legislature on April 11, 2023, illustrating the success and broad impact of the repository.

The Division of Digital Learning has marked the anniversary of OERTX's launch with programming about the repository and OER. This has included a panel presentation with OERTX users, a session on landscape survey findings presented by DDL staff with DigiTex and ISKME, and OER community discussions. In addition, in March 2023, the DDL celebrated Open Education Week with a series of sessions that focused on the innovative OER research conducted by the THECB previously mentioned, first-hand experiences of student and faculty use and development of OER, and breakout sessions about the OER in Texas Statewide Playbook 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). User design research conducted by the DDL in 2021, in partnership with The University of Texas at Austin School for Design and Creative Technologies and Vidlet, also pointed to the need for intuitive search, content curated to meet the needs of educators, and user-friendly collaboration tools. OERTX contains tools that allow users to find, create, and use OER and adapt these materials to the needs of Texas institutions of higher education. 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 is working 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.

5. Continue to recognize 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 means by which the THECB spotlights these exemplars. For example, in April 2023, DDL staff and a cohort that completed the Resource for the Resources Retreat training were invited by DDL staff to present a panel at the Texas Digital Learning Association Conference. The cohort included faculty as well as an instructional designer and librarian from McLennan Community College. The cohort from McLennan Community College shared their work advancing and supporting OER at the institution, such as examples for OER activities and initiatives for engagement, awareness, and capacity building on their campus.

6. Looking to the future of the open ecosystem.

The DDL is continuously studying developments in open education. This includes examining the effect of emerging technologies, such as artificial intelligence and learning more about developing trends at institutions. The 2023 landscape survey will examine 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.

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. The addition of two hubs in OERTX illustrates that the digital repository can be used to support open education beyond instruction. The [Texas Insights Accelerator](#) is a data-intensive improvement initiative, driven by the Insights Accelerator Division at THECB, where practitioners can provide critical feedback and co-design innovative solutions to challenges facing students and institutions in higher education. The [Student Success Inventory](#) hub includes collections for six core student success objectives: improving academic performance, improving affordability, improving belonging and well-being, improving credential attainment, improving post completion goals, and improving retention. Users of that hub can explore student success programs and initiatives offered throughout the state of Texas, browsing by the type of practice offered by the program, by the intended target population of the program, by the student success objectives of the program, by alignment with the goals of the *Building a Talent Strong Texas* strategic plan, or by the Texas institution offering the program.

Collaborating with agency partners like the Texas Insights Accelerator and Student Success Divisions and supporting initiatives such as the Student Success Inventory 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. 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

OE Global Open Policy Award: https://awards.oeglobal.org/awards/2022/open-policy/oertx-initiative/

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/

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 O, 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

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

Texas Insights Accelerator: https://oertx.highered.texas.gov/hubs/texasinsightsaccelerator#groups

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

Texas Higher Education
COORDINATING BOARD

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

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