

LWTech OER Development Funding: Year 1 (2021-2022) Report

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Introduction

Open Educational Resources (OER) is defined by BCcampus as "teaching, learning, and research resources that, through permissions granted by the copyright holder, allow others to use, distribute, keep, or make changes to them." Specific types of OER include textbooks, test banks, supplemental instructional tools, individual videos and still images, and more. Benefits of the development and use of OER include cost savings for students; availability of course materials – including textbook content – on day one of class for all students; more representative and relevant materials, and creative pedagogical applications through processes of revising and remixing, which can flexibly support diverse learning needs.

At Lake Washington Institute of Technology (LWTech), the culture and application of OER and a culture around open practices has steadily grown over the last decade. As presented on the college's [OER webpage](#), local initiatives have ranged in size and scope to support a plethora of academic programs, individual courses, and specific assignments. These projects, described below, include those supported by multi-year grants tied to specific outcomes, as well as grassroots efforts developed and funded in-house through the Office of Instruction.

In recent years, work around OER has been primarily facilitated and led by a team of committed faculty and administrators. The OER Core Team has met at least once per quarter since January 2018 to discuss ideas and find ways to support students through instruction and resource use at the college. The fact that the team exists four plus years strong is indicative of the commitment to OER by members from many areas of the college. The work continues to evolve and expand to reach more students, more faculty, and more areas of the college.

OER Initiatives and Funding at the LWTech

Funding is essential to OER work at LWTech. Through a series of grants starting in 2016, LWTech has sustained interest in and continued development of OER throughout the college. These grants include:

- 2016-2020 - Achieving the Dream's OER Degree Initiative, which funded development of an OER pathway to the Associate in Biology DTA/MRP as well as numerous OER courses at LWTech in the areas of Math, Chemistry, Psychology and Sociology.
- 2016-2017 - Library as Open Education Leaders (LOEL), which funded three collaborations between faculty and librarians in OER work.

- 2018-2021 - Optics, Photonics, and Lasers Technical Education Coordination Network, which was a National Science Foundation grant that brought together seven colleges to develop fully OER course materials for Photonics classes.
- 2019 - Assessment in Action (AiA) Project on Open Pedagogy, which was led by librarians and researched the effectiveness of open pedagogical practices by employing open pedagogy in several courses at LWTech.
- 2021-2024 - Open for Learning in Manufacturing Technology Project, which is a National Science Foundation grant that is funding the development of OER courses in Electronics and Welding Technology at LWTech.

These grants prompted librarians to incorporate OER in their trainings and workshops. Since 2016, librarians have provided copyright, open licensing, and open pedagogy sessions that are open to the entire school on an annual (and often quarterly) basis. These workshops help spread interest and understanding of OER.

In order to facilitate further OER opportunities, the OER Core Team discussed and decided to purchase a subscription to [Pressbooks](#), an open book publishing platform, in Winter 2021 as part of the WA State Board of Community and Technical Colleges network account. Funding for this purchase came through a SPARC grant. Pressbooks allows people to discover and create well-designed, accessible digital books. It is known for housing OER. This purchase spurred workshops on the Pressbooks platform starting in Fall 2021, which garnered interest from approximately 30 faculty in creating Pressbooks of their own. A year later, the [LWTech Pressbooks catalog](#) has 13 digital books publicly available and openly licensed.

In Fall 2021, the OER Core Team began conversations surrounding a need for budgeted funding beyond grants. The Librarian Coordinator, Greg Bem, met with staff at [Oregon Institute of Technology \(OIT\)](#) whose OER initiatives inspired formal funding of OER projects at LWTech. Vicki Chew, Dean of Instruction, advocated for funding for OER development and, during Fall-Winter break of 2021-22, Dr. Suzanne Ames, Vice President of Instruction, approved the allocation of \$4500 from a larger Perkins Grant for any Prof-Tech faculty to develop OER. Vicki Chew used her budget to match this amount for non-Prof-Tech faculty so that all faculty would be compensated for OER development, which brought funding to a total of \$9000 for the 2021-22 fiscal year.

Description of the LWTech OER Development Funding Program

The purpose of this program was to encourage faculty to develop required resources for their classes that are free of cost to their students and tailored to student's needs and experiences. These resources may be in the

form of an eBook on Pressbooks, Canvas course resources, or something equivalent. As well as creating materials from scratch, instructors were encouraged to use this funded time to search for and remix, update, or format OER that may already be available online. Faculty requirements included:

- Meet with librarian(s) at the beginning of the project.
- Complete creating, finding, adapting, or collaborating on your proposed work.
- Openly license the completed work using a [Creative Commons license](#).
- Share the completed work beyond LWTech on a platform such as [Pressbooks](#), Canvas Commons, and/or GitHub.
- Meet with librarian(s) at the end of the project.
- Commit to using the completed work in the 2022-23 academic year.
- Depending on the faculty's level of knowledge described in the application and at the initial meeting with librarian(s), participants may have been required to:
 - Watch a short OER training video.
 - Attend Pressbooks working sessions.

Year 1 Timeline

While the OER Development Funding program was dreamed of for several years, the first formal year of the program was 2021-2022. The process for getting the program to run began in the Fall quarter of 2021, during the height of the pandemic. LWTech, like many other schools, suffered from low enrollment and many faculty looking to evolve their curricula and materials through the shifts between in-person instruction to online and hyflex.

Thanks to a recent subscription to Pressbooks the librarians had been providing training and generating interest around book publishing on Pressbooks for over a year. The librarians determined that many faculty, including adjuncts, did not have the fiscal support to revise preexisting or develop added resources, including OER, despite expressing great interest.

In Fall 2021, the librarians put forward the request to start the OER Development Funding program. The librarians researched similar programs, including the well-regarded Oregon Tech Library OER Grant at Oregon Institute of Technology (OIT), to support the proposal. Within the Fall quarter, funding was approved by the Office of Instruction and then Vice President of Instruction Dr. Suzanne Ames. At the beginning of the Winter quarter, in January 2022, the librarians began to design the program at LWTech.

After several weeks of dedicated design work, the program had been drafted and finalized. The program was exclusively led by the librarians, with no management of other supervision. The first program announcement and call for project proposals was made on January 24, 2022. The librarians created a priority deadline for project proposals of February 28, 2022, and a final deadline of April 14, 2022. Remarkably, every applicant for Year 1 submitted their proposal by the priority deadline. Shortly after the priority deadline, the librarians were able to review and approve/reject proposals before the Spring Break, allowing faculty the time to work on their projects primarily in Spring 2022.

The number of projects and interest demonstrated from many areas of the college reflected the demand for fiscal support of OER work. With the support of the Instructional Dean Vicki Chew, who oversees that library, the Office of Instruction was informed of the OER Project's early momentum. On April 12, 2022, additional funding was confirmed for Year 2 of the program, well in advance of the deadline for completed projects.

June 6, 2022 was the deadline for faculty to submit their completed projects, and most of the projects were submitted according to program requirements for final librarian review. On June 30, following Spring 2022, Year 1 was complete, and all allocated funds were dispersed to participating faculty. It should be noted that several projects were incomplete due to unexpected barriers and constraints identified by participating faculty after beginning the project. Several of the funded projects were extended into Year 2 of the program, supported with additional funding.

On June 9, the first call for proposals for Year 2 was announced. Unlike Year 1 (which technically only ran two quarters, with one quarter of faculty work), Year 2 will run an entire academic year. The final deadline for Year 2 project applications is April 3, 2023. At the time of writing this report, there were four applications submitted for Year 2.

Results of the Program

We had strong faculty interest in the first year, demonstrated through number of applicants, completed projects and ongoing projects:

- Number of faculty members who applied including group applications: 19
- Completed projects: 7
- Ongoing projects: 9
- Canceled projects: 1

Because funding was not allocated until Winter 2022, the librarians used the first quarter to design the program, advertise to faculty, and provide time for faculty to apply. This left only Spring quarter 2022 for faculty to complete projects. Even so, seven projects were completed:

- **Letty Barnes**, Chair of Business Technology (BTE), created [Practice Assignments and Weekly Challenges](#) for her Microsoft Project course and shared them through Canvas Commons.
- **Catherine Donaldson**, English Language Learning (ELL) faculty, created a Pressbook titled, [ELL Novice Practices](#).
- **David Fox**, ELL faculty, created a Pressbook titled, [Common American English Pronunciation Patterns](#).
- **Priyamvada Singh**, Electronics Faculty, created [slide presentations](#) for her Mechatronics course and shared them via OER Commons.
- **Lindsey Smith**, Political Science Faculty, created Canvas modules titled, [The Truth about “Fake News.”](#)
- **Cathy Zupke**, Chair of Engineering, added questions to [WAMAP.org database](#) shared with all of WA, and BC to Oregon, open to faculty and free to students.

When the librarians realized one quarter would not be enough time for many of the projects to be completed, faculty were offered an extension to continue their work into the next fiscal year. Nine projects opted to take this extension and are set to complete projects early in the 2022-23 fiscal year. One faculty member chose to cancel her project due to lack of openly licensed materials available in her subject area.

Benefits and Value of the Projects

In general, OER work benefits college and the community in numerous ways, and the librarians look forward to observing how the projects of this program impact LWTech going forward. The librarians initially conceived of a program providing the following benefits to the college as outlined below in sections: Financial Benefits for Students; Creative Value for Individual Faculty Members; Support for Equity, Diversity, and Inclusion at the College; and Community Benefits for OER within and Beyond the College.

Financial Benefits for Students

Undoubtedly, replacing for-cost, often expensive teaching and learning resources (such as textbooks) with OER will support students financially. The librarians worked alongside Sarah Chandler (from LWTech's Office of Instructional Research) to pull and organize data around cost savings for students. Some of the findings, based on courses run in the past academic year (2021-2022) are shown below:

Impacted Courses	Cost Saved per Student	Sections Run (Within an Academic Year)	Students Enrolled (Within an Academic Year)	Estimated Cost Savings per Project(s)	Estimated Cost Savings per Year
ENGR& 224, 215, 214, and 225	\$90.00	16	197	\$2,216.25	\$17,730.00
ELL 015, and 016	\$64.00	8	208	\$1,664.00	\$13,312.00
POLS& 202	\$25.00	6	152	\$475.00	\$3,800.00
ELL 080	\$37.22	2	60	\$279.15	\$2,233.20
BTE 281	\$100.00	2	17	\$212.50	\$1,700.00
ELEC 216	\$200.00	2	4	\$400.00	\$800.00
				Total:	\$39,575

The total cost savings per year, based on the final column in the above table, is \$39,575, which far exceeds the funding program’s budget. While the data above is subject to change any given year, each of these courses impacted by OER projects in Year 1 has existed within their respective academic programs for multiple years, with dedicated full-time and part-time faculty supporting the evolution of the course.

The librarians hope to continue to expand on this data year-over-year to show the cost savings resulting from continued use of the OER developed above, as well as savings from new OER developed through the program.

The Program Provides Creative Opportunities and Professional Development for Faculty Members

As discussed in the introductory sections of this report, faculty often express an interest in working on OER and curriculum/material development, but do not have the time or fiscal support to do so. This program has provided many faculty with the time and fiscal support to express their creativity intentionally and more fully.

In developing OER for the courses they teach and are subject matter experts in, they are provided an opportunity to do more than simply select a textbook from a publisher. Their work represents how they want to teach and the type of resources they want to use to be effective while at the college.

As a professional development opportunity, the program supports faculty who are interested in the creation and publication of original work, even if the OER is composed of remixed or adapted content. Faculty are also given the opportunity to collaborate with librarians, conduct research into the materials that exist within their subject area, and learn how to use special tools and platforms, such as Pressbooks, to accomplish their goals.

Faculty are also introduced to challenging topics like open licensing and fair use, which introduces a level of critical reflection into the work for the faculty member on their journeys as educators.

OER created in the program support Equity, Diversity, and Inclusion at the College

OER is often connected to equity because it is responsive to diverse learning needs within a given academic community. As mentioned above, OER reduce the costs of materials for students. The cost of college education continues to be a major barrier for student success (including retention and completion), and OER can mitigate that barrier.

Additionally, OER can be connected to the effectiveness of the materials throughout the curricula. When faculty are at the mercy of a publisher's textbook, much of the content may seem untouchable, irrelevant, and unusable. Faculty may not find it appropriate for their given course, and students may not find it compelling due to the distance between the publisher and authors and the college community. OER responds to these problems by offering flexibility in the creation and modification of content. Materials can be created to use examples that represent the identities, backgrounds, and experiences of the students and the community directly. Materials can use language that makes sense and cultural references that are contemporary. Materials can have visuals that show diverse students that improves upon the historic prevalence of white people in teaching and learning resources.

Overall, there is no limit to how OER can support the evolution and refinement of materials that make sense in specific contexts and communities. These ideas are instilled into faculty throughout the program, and faculty have expressed to the librarians their interest in working in OER to create materials that are relevant, inclusive, and effective at supporting teaching and learning.

The Program Supports Open Culture within and Beyond the College

OER at LWTech continues to become normalized year-over-year and there continue to be opportunities to learn about, understand, and develop OER in new and exciting ways. Much of the expansion of OER has been the result of the OER Core Team; however, prior lack of structure has limited the OER efforts to grant-funded and grassroots efforts, both of which offer extreme solutions that are also unstable and unsustainable for the long run.

The OER Development Funding program is pivotal in supporting the open culture at the college due to its consistency and repeatability. Supported by the college's Office of Instruction (including via its budget and its leadership), the program is one of the first formal, internal, and sustainable commitments to OER that the

college has seen (following the inclusion of OER in the job description of librarians at the college in 2017, and the expansion of the college's library budget for OER printing and cursory costs starting in Summer 2022).

Supporting OER and fostering an open culture are two actions that do not exist in a vacuum. The investment and commitment to the work at LWTech reflects highly within the academic community, specifically the State Board of Community and Technical Colleges (SBCTC). At the time of this report, numerous colleges in Washington, including Shoreline Community College and South Puget Sound, have begun developing and/or running similar OER programs. The ecosystem of OER within the CTCs, with support from the State Board and locally, continues to grow. Pivotal actors like LWTech can provide examples to other schools that want to start their own programs, and there may be potential collaboration on programs in the future.

It should be noted that as Year 1 was recently completed, many of the specific resources developed in the first year's projects are still to be used. As such, there is only limited understanding of the potential benefits these resources will bring and the relationship of the faculty project leads to OER going forward; however, the commitment of the faculty thus far, by way of their application and the successfully created OER, leaves the librarians optimistic and inspired into Year 2.

Reflection on the Program and the Program's Future

Despite the first year of the program being shorter than a full calendar year and only ending recently, the librarians have already reflected on the numerous benefits of the program and are excited about its future. The librarians have seen faculty directly benefiting from more direct investment in their work. Faculty members were optimistic and excited throughout the course of their projects. By being paid for their work and supported in a structured system, most were able to go further than they have been able to in the past. Some of the faculty involved were already familiar with similar projects connected to grant-funded programs; still, the open-ended nature of this program includes the added benefit of flexibility and creativity often missing from grant requirements and restrictions.

The librarians found a wide range of engagement from faculty, especially given the many diverse backgrounds of the faculty in the context of open education. The librarians were excited to establish and reinforce relationships with faculty members across the departments at LWTech. In some cases, faculty had no experience with OER and needed significant support from the librarians. Others had prior knowledge of OER and were able to be more independent with their work. For Year 2, the librarians are hoping to better identify (within the application process) which faculty are experienced in doing this work and requiring an Introduction

to OER training for inexperienced faculty. This will help respond to issues around adapting materials, licensing specifications, and other challenges that came up from faculty throughout their projects. Additionally, more communication is always recommended, and the librarians found that there could have been more communication required throughout the project timeline, rather than just at the beginning and the end.

In some cases, in the first year, several applications did not specify the expected rigor, time requirements, or type of work required within the project. As a result, the librarians assigned funding (award amounts) based on assumptions and educated guesses. Due to a lack of time and some lack of specification on the application form, the librarians did not have enough information to accurately assign awards. In most cases, the award amounts covered more than enough hours to satisfy the work; however, in several cases, faculty worked more hours than they were paid (volunteering their time), and in other cases faculty ran out of payment and expressed the need for additional funding. The librarians, in learning of these experiences, have offered the flexibility of allowing for renewed applications from faculty in the second year. Faculty interested in larger projects (requiring much more than this project's cap at 20 hours of paid labor) may prefer to seek funding outside of LWTech.

Overall, the librarians are incredibly excited about the results of the first year of the program. For the 2022-2023 year, the librarians look forward to additional robust OER creation, adoption, and advocacy throughout the college and the SBCTC system. Undoubtedly Year Two will also be an incredible learning experience for all involved, as the college grows and evolves to more ubiquitously support open education efforts of different disciplines and sizes.