## Connecticut Commission for Educational Technology



# **Open Education Resources**

Survey Results and Opportunities for Connecticut Schools and Universities

November 14, 2019



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# **OER in Connecticut**

## **Survey Results and Opportunities**

## Introduction

Making high-quality, digital educational materials available to all learners and institutions remains one of the Connecticut Commission for Educational Technology's key initiatives within its <u>five-year state educational technology plan</u>. Access and equity remain cornerstones of this plan, with the use of open educational resources, or "OER," as a central component in equipping students, educators, and institutions for learning across our state.

To raise awareness of OER's promise and to capture data on its use, the Commission launched the "Go Open Connecticut" campaign in the spring of 2019. This effort included outreach through social media, development of video testimonials, curation of OER resources, and a survey designed to capture educators' use of, and attitudes toward, OER. More information is available at <a href="www.GoOpenCT.org">www.GoOpenCT.org</a> and @GoOpenCT. From a national perspective, Connecticut stands as one of 20 states that have taken

the U.S. Department of Education's "Go Open" pledge to promote the use of OER (see <u>Tech.Ed.gov/open</u> for details). The Commission works actively with these other states to share best practices.



Given the existing interest in and use of OER in our state, the Commission has convened a committee of OER and curriculum experts over the past several years to provide insights and recommended actions on open education. In the spring of 2019, the group put their support behind the branding awareness campaign as well as a survey for K – 12 and higher education instructors and leaders. The instrument captures information about current use, perceived benefits, barriers to adoption, and needs around training and support. The survey also collects input on features that educators need to create, share, and curate resources with their peers in Connecticut and the national GoOpen network. This report shares the results of the survey and opportunities to leverage OER to the benefit of students, educators, and institutions across Connecticut.

# **Executive Summary**

Participants in the 2019 statewide OER survey responded to questions about their background, use of open resources, and needs concerning a platform for authoring, sharing, and professional development. The survey presented the following definition from Creative Commons of open education resources for their consideration, prior to answering any questions:

Free and openly licensed educational materials that can be used for teaching, learning, research, and other purposes.

#### **Promise**

Survey results indicate an eagerness among many to leverage OER across the state. Respondents represent a mix of K – 12 and higher education leaders and educators, with a range of OER awareness and understanding. Most respondents (72 percent) already create instructional materials for teaching, of which 86 percent share those materials with their colleagues across departments and institutions. Respondents point to cost savings (for students in higher education, districts in K – 12); flexibility and currency; and high quality as the most compelling reasons why they have adopted the use of OER in their classrooms and courses. The practice of creating and sharing digital learning materials already has strong adoption in Connecticut. See pages 4 – 17 to learn more about the practice and promise of OER in Connecticut.

#### **Needs**

Creating, collecting, and sharing OER takes time, as survey respondents indicated in their list of concerns regarding open education. Educators and leaders expressed the need for ongoing professional development in several areas, from discovery and vetting of materials to copyright and publishing best practices. See pages 18 – 20 for details on educator and leader needs.

#### **Opportunities**

The survey results as well as widespread OER adoption point to key areas of opportunity for Connecticut across professional development, technology to share materials, funding, and advocacy for OER adoption. Turn to pages 25 – 27 for a detailed list of opportunities and recommendations for leveraging OER in Connecticut.

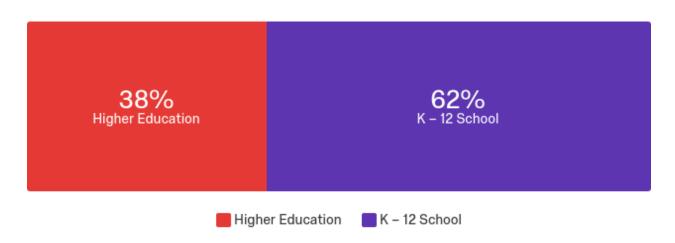
The following sections provide quantitative and qualitative results from the survey, as well as longer form, open-ended responses.

# **Survey Responses**

## Respondents

#### **Institution Type**

Q: In what type of institution do you work?



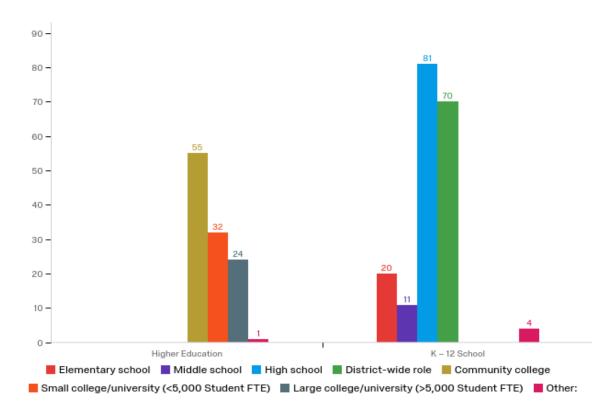
| Type of Institution                      | Percent | Count |
|--|---------|-------|
| Higher Education (College or University) | 38.39%  | 119   |
| K-12 School                              | 61.61%  | 191   |
| Total                                    | 100.00% | 310   |



Responses come mostly from those in the K-12 community, representing a diversity of regions and enrollment sizes, as well as from higher education.

## **School Type**

Q: Choose the type of institution that best describes where you serve.



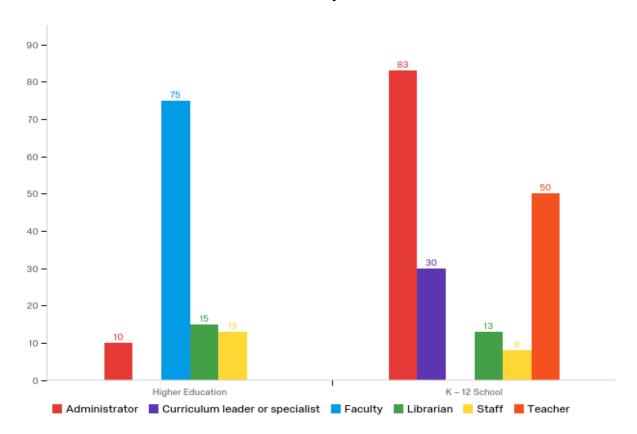
| School Type                                   | %      | Count |
|---|--------|-------|
| Elementary school                             | 6.71%  | 20    |
| Middle school                                 | 3.69%  | 11    |
| High school                                   | 27.18% | 81    |
| District-wide role                            | 23.49% | 70    |
| Community college                             | 18.46% | 55    |
| Small college/university (<5,000 Student FTE) | 10.74% | 32    |
| Large college/university (>5,000 Student FTE) | 8.05%  | 24    |
| Other   | 1.68%  | 5     |
| Total   | 100%   | 298   |



Educators from the state's community colleges and high schools represent the largest groups of respondents.

#### Role

## Q: Choose the role that best describes you.



| Role                            | %      | Count |
|---------------------------------|--------|-------|
| Administrator                   | 31.31% | 93    |
| Curriculum leader or specialist | 10.10% | 30    |
| Faculty                         | 25.25% | 75    |
| Librarian                       | 9.43%  | 28    |
| Staff                           | 7.07%  | 21    |
| Teacher                         | 16.84% | 50    |
| Total                           | 100%   | 297   |

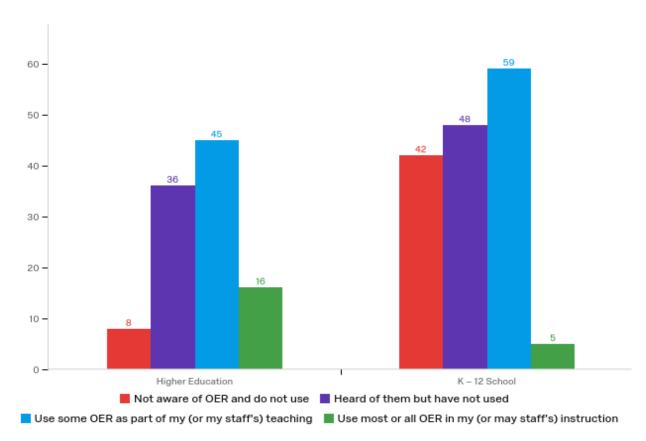


In higher education, faculty represent most of the respondents; K-12 responses come mostly from district administrators and teachers.

## Awareness and Use

#### **General Awareness of OER**

Q: How aware are you of open education resource (OER) materials?



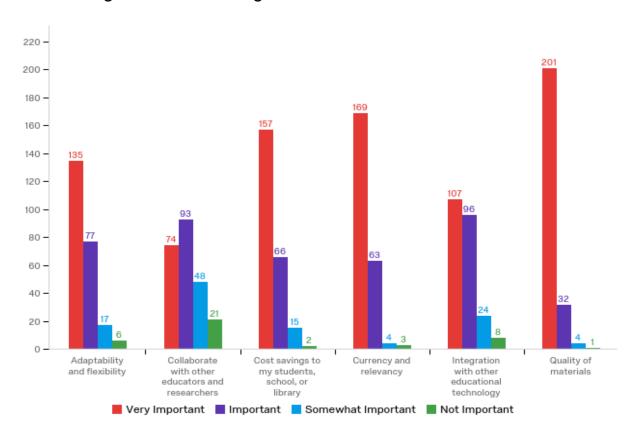
| Answer   | %      | Count |
|--|--------|-------|
| Use some OER as part of my (or my staff's) teaching    | 40.15% | 104   |
| Heard of them but have not used                        | 32.43% | 84    |
| Not aware of OER and do not use                        | 19.31% | 50    |
| Use most or all OER in my (or may staff's) instruction | 8.11%  | 21    |
| Total  | 100%   | 259   |



Most respondents use some OER, but many respondents have not yet leveraged open resources for instruction.

## Reasons for Using OER

Q: If you have interest in or currently use OER materials, how important are the following reasons for doing so?



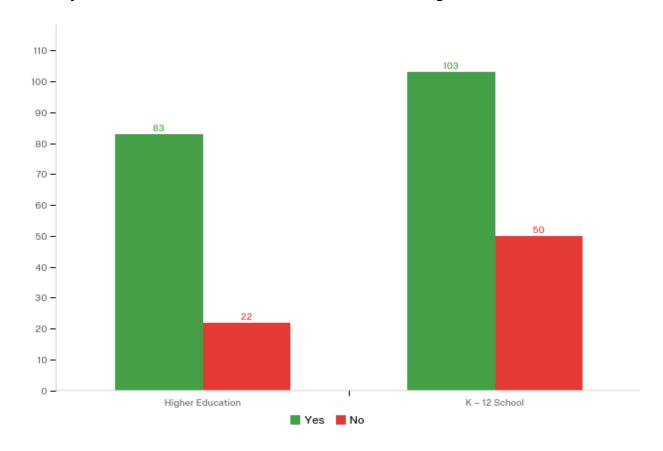
| Benefit  | Very<br>Import |     | Import | ant | Somewho<br>Importar |    | Not<br>Import | ant |
|--|----------------|-----|--------|-----|---------------------|----|---------------|-----|
| Quality of materials                             | 84.45%         | 201 | 13.45% | 32  | 1.68%               | 4  | 0.42%         | 1   |
| Currency and relevancy                           | 70.71%         | 169 | 26.36% | 63  | 1.67%               | 4  | 1.26%         | 3   |
| Cost savings to my students, school, or library  | 65.42%         | 157 | 27.50% | 66  | 6.25%               | 15 | 0.83%         | 2   |
| Adaptability and flexibility                     | 57.45%         | 135 | 32.77% | 77  | 7.23%               | 17 | 2.55%         | 6   |
| Integration with other educational technology    | 45.53%         | 107 | 40.85% | 96  | 10.21%              | 24 | 3.40%         | 8   |
| Collaborate with other educators and researchers | 31.36%         | 74  | 39.41% | 93  | 20.34%              | 48 | 8.90%         | 21  |



The most compelling reasons for leveraging OER remain quality, currency, and cost savings.

#### **Creation of Educational Materials**

## Q: Do you create instructional materials for teaching?



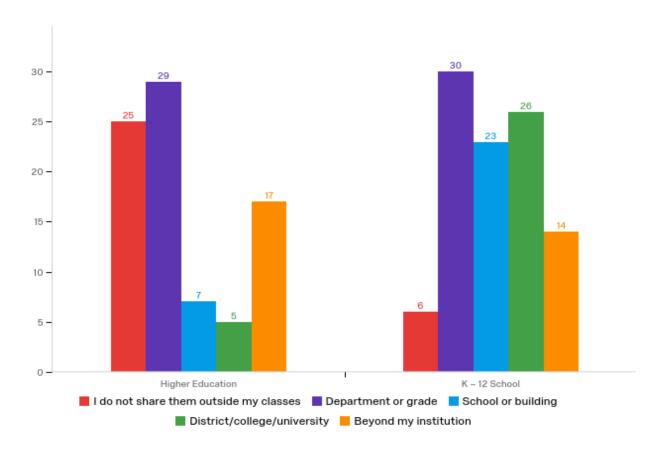
| Create Instructional Materials? | %      | Count |
|---------------------------------|--------|-------|
| Yes                             | 72.09% | 186   |
| No                              | 27.91% | 72    |
| Total                           | 100%   | 258   |



Nearly three-quarters of respondents already produce their own instructional materials.

## **Sharing of Educational Materials**

#### Q: At what level do you share your materials?



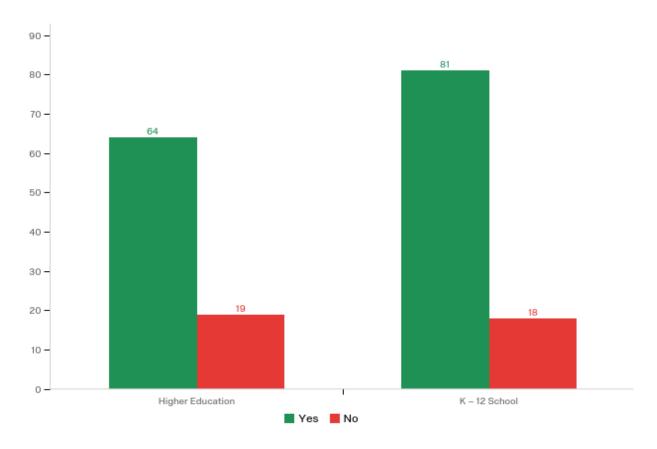
| Level of Sharing                       | %      | Count |
|--|--------|-------|
| Department or grade                    | 32.42% | 59    |
| I do not share them outside my classes | 17.03% | 31    |
| District/college/university            | 17.03% | 31    |
| Beyond my institution                  | 17.03% | 31    |
| School or building                     | 16.48% | 30    |
| Total                                  | 100%   | 182   |



Most educators already share their materials with peers in their own college or district, with a smaller number collaborating outside their institution.

## Willingness to Share Materials

Q: Would you be willing to share your materials with a wider audience?



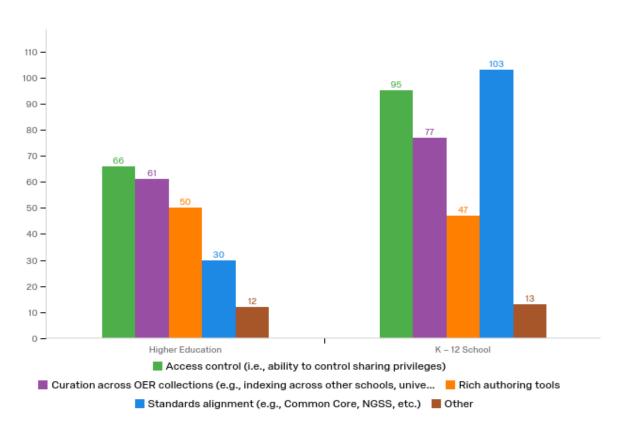
| Willing to Share Materials | %      | Count |
|----------------------------|--------|-------|
| Yes                        | 79.67% | 145   |
| No                         | 20.33% | 37    |
| Total                      | 100%   | 182   |



Many educators remain open to sharing the materials they develop with other professors and teachers.

#### Desired Features for an OER Sharing Platform

Q: If the State were to provide a technology platform for sharing OER across schools, colleges, and libraries, what features would you need?



| Desired OER Sharing Platform Feature   | %      | Count |
|--|--------|-------|
| Access control (i.e., ability to control sharing privileges)                                       | 29.06% | 161   |
| Curation across OER collections (e.g., indexing across other schools, universities, and libraries) | 24.91% | 138   |
| Standards alignment (e.g., Common Core, NGSS, etc.)  | 24.01% | 133   |
| Rich authoring tools   | 17.51% | 97    |
| Other (details below)  | 4.51%  | 25    |
| Total  | 100%   | 554   |



Survey participants expressed interest in a number of different repository features, especially standards alignment for K-12 educators.

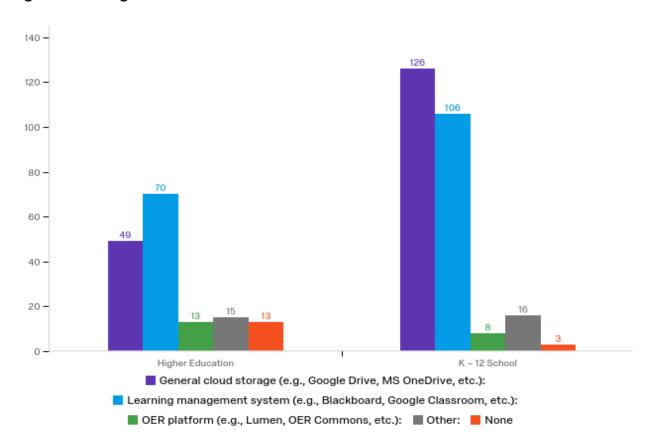
#### Desired Features for an OER Sharing Platform

The following free-text responses provide detail from respondents who selected the "Other" option above.

- Will resources be vetted?
- Filtering over many fields
- ISTE and CSTA standards, please
- Good search
- I have concerns about vetting these resources. Quality and alignment to standards are important.
- We would want to vet the materials our teachers use following a district protocol for the adoption of instructional materials
- Models of tests questions, etc.
- Current resources
- LMS that can handle large SCORM files (contain many videos)
- GSuite integration tools
- I don't understand all these above choices mean.
- Searchable database for ideas of how to use
- Evidence base for efficacy of tools
- Ed Reports Ratings of each resource
- indexing across intended age, subject, etc.
- Quality and safety of content
- Strong search feature in order to easily locate specific topics
- I think creating our own platform is a mistake, and unnecessarily expensive
- Do you mean like a repository? I don't understand this question.

## **Current Means of Managing Digital Learning Materials**

Q: What platform do you currently use for creating, collecting, and sharing digital learning materials?



| Platform Use  | %      | Count |
|---|--------|-------|
| General cloud storage (e.g., Google Drive, MS OneDrive, etc.)         | 41.77% | 175   |
| Learning management system (e.g., Blackboard, Google Classroom, etc.) | 42.00% | 176   |
| OER platform (e.g., Lumen, OER Commons, etc.):                        | 5.01%  | 21    |
| Other   | 7.40%  | 31    |
| None  | 3.82%  | 16    |
| Total   | 100%   | 419   |



Nearly all respondents create and maintain a digital collection of educational materials, which points to the potential of connecting and sharing these libraries.

#### **Current Means of Managing Digital Learning Materials**

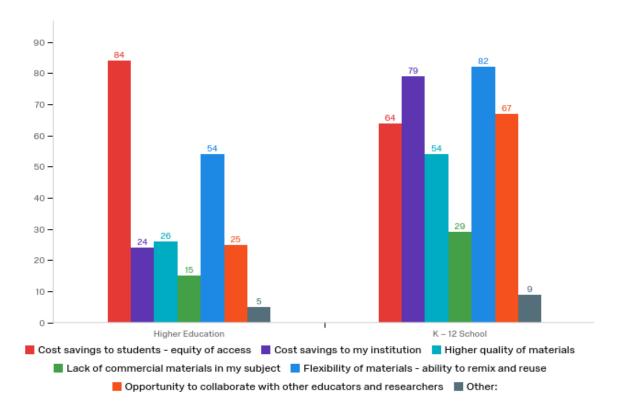
The following list, organized alphabetically, reflects the platforms used to store and manage digital learning materials, based on responses to the "Other" option above. For tools that more than one respondent indicated using, totals appear in parentheses.

- Apple pages, keynote, numbers, share on website
- Atlas Rubicon Curriculum Mapping (3)
- Bepress
- Blackboard (10)
- Canvas (2)
- CK-12
- CourseSites
- District Servers
- E-mail
- ExplainEverything
- Facebook
- Geogebra
- Github Pages
- Google Classroom (19)
- Google Sites
- Hard drive
- IG
- Kiddom
- LibGuides (2)
- Library catalog

- Library website (Finalsite)
- Moodle (2)
- My school's Power Learning (formerly Haiku)
- myOpenMath (4)
- Nearpod
- OpenStax
- Pinterest
- Powerschool
- Prowise Presenter
- Quip
- Schoology
- Seesaw
- Shared drive on school network
- Slideshare
- SoftChalk
- Swivl
- TechinPedagogy.com
- Thumb drives
- Twitter (2)
- YouTube (2)

## Reasons for Using OER

Q: If you use or are considering the use of OER for instruction, why?



| Reasons to Use OER  | %      | Count |
|---|--------|-------|
| Cost savings to students  | 23.99% | 148   |
| Cost savings to my institution                                  | 16.69% | 103   |
| Higher quality of materials                                     | 12.97% | 80    |
| Lack of commercial materials in my subject                      | 7.13%  | 44    |
| Flexibility of materials - ability to remix and reuse           | 22.04% | 136   |
| Opportunity to collaborate with other educators and researchers | 14.91% | 92    |
| Other   | 2.27%  | 14    |
| Total   | 100%   | 617   |



Not surprisingly, cost savings emerges as the top reason educators use OER, with flexibility of materials also ranking as a top benefit.

#### **Reasons for Using OER**

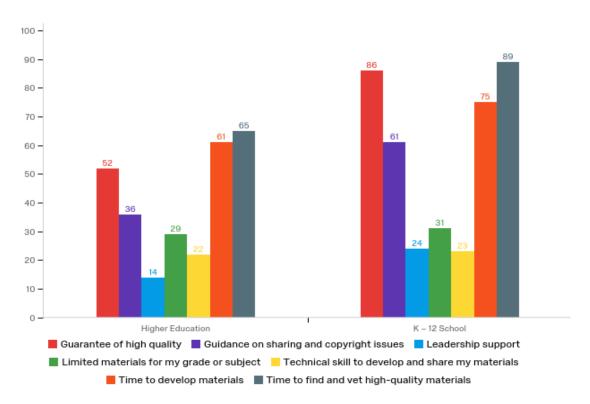
The following free-text responses provide detail from respondents who selected the "Other" option above.

- Ability to have current materials in certain subjects e.g., Astronomy
- I like to try new things, and OER resources offer a way for me to learn about new teaching resources
- Ability for the OER materials to be more up-to-date
- We would consider using the materials if there was a way to vet them for quality.
- I'm in a growing and changing field that doesn't have a lot of up to date materials.
- Customization of topics
- Not considering using OER
- Save time reinventing the wheel
- Access to materials that our district does not have access to
- Ed Reports ratings
- Time saving
- Instant access for students
- Pressure the bookstore to be more open.

#### **Needs and Concerns**

#### General Concerns and Challenges

Q: What concerns or challenges do you face regarding the use of OER?



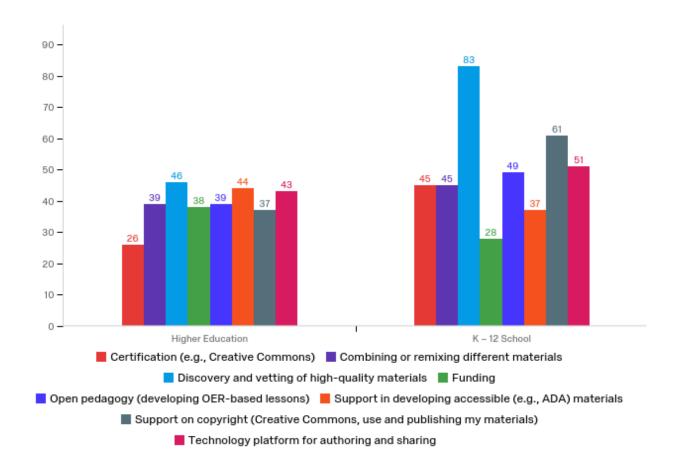
| Concern or Challenge                              | %      | Count |
|---|--------|-------|
| Time to find and vet high-quality materials       | 23.05% | 154   |
| Guarantee of high quality                         | 20.66% | 138   |
| Time to develop materials                         | 20.36% | 136   |
| Guidance on sharing and copyright issues          | 14.52% | 97    |
| Limited materials for my grade or subject         | 8.98%  | 60    |
| Technical skill to develop and share my materials | 6.74%  | 45    |
| Leadership support                                | 5.69%  | 38    |
| Total   | 100%   | 668   |



While OER can provide access to high-quality materials, educators also have concerns around the vetting and alignment of OER, as well as the time to author, search for, and curate materials for instruction.

#### **Support and Training Needs**

Q: Indicate each of the areas where you need support around OER.





To address their concerns about OER use, educators seek training on how to look for, review, and place appropriate copyrights on learning materials.

| Training or Support Need   | %      | Count |
|--|--------|-------|
| Discovery and vetting of high-quality materials                          | 17.70% | 129   |
| Support on copyright (Creative Commons, use and publishing my materials) | 13.44% | 98    |
| Technology platform for authoring and sharing                            | 12.89% | 94    |
| Open pedagogy (developing OER-based lessons)                             | 12.07% | 88    |
| Combining or remixing different materials                                | 11.52% | 84    |
| Support in developing accessible (e.g., ADA) materials                   | 11.11% | 81    |
| Certification (e.g., Creative Commons)                                   | 9.74%  | 71    |
| Funding  | 9.05%  | 66    |
| Other  | 2.47%  | 18    |
| Total  | 100%   | 729   |

#### **Support and Training Needs**

The following free-text responses provide detail from respondents who selected the "Other" option above.

- Getting administrators to understand what OER is, and what benefits it can offer
- Time to work on curating and sharing materials
- Our district currently has materials and resources. We would want to review what was offered to see if the OER materials provide the same supports.
- My concerns are around a universal approach to instruction in the district and the ability of the district to have oversight of what instructional materials are being used
- Mostly it's a time thing
- Probably all of the above, since I don't really understand what it is
- My biggest concern is the time I will need to read and prepare my class by using OER. Using new OER requires new class prep and will take a lot of time.
- OER should be included in our tenure package as a number 1 priority. The State
  will assure that, we, talented college professors, create new materials distributed
  to our students for free.
- Department
- Support to maintain supplemental resources not becoming primary sourcing
- Assessment platform for student use
- Seems like I will need all support, LOL

#### **Open-Ended Responses**

#### Resources to Share

Q: Do you have any open resources you would like to share with the broader educational community? If so, provide link(s) below with a brief description.

- Cold Spring Harbor DNA Education Center is great for biology/DNA stuff. Crash course videos on YouTube are also always high quality/
- CS4All, OpenSimon, CSteachers.org, Amazon Future Engineer School, CodeHS, CodeAvengers
- http://learn.chm.msu.edu/vibl/index.html (virtual microbiology lab)
   http://eclinpath.com (Cornell University diagnostics)
   https://www.austincc.edu/microbugz/index.php (shared microbiology community college link) https://www.merckvetmanual.com (used in multiple courses, also available as hard copy)
   http://atlas.sund.ku.dk/microatlas/veterinary/bacteria/ (microbiology atlas)
- https://drive.google.com/file/d/1kynSL3zFjkrDK6lU8AETsa6nl1G0z7S\_/view?usp=sh aring This is the workbook that we use for MAT095 (Elementary Algebra) at Housatonic Community College.
- https://libguides.humboldt.edu/openedu A libguide from Humboldt University
  about OER https://www.oercommons.org/ OER Commons is a public digital
  library of open educational resources. Explore, create, and collaborate with
  educators around the world to improve curriculum.
  https://www.edutopia.org/open-educational-resources-guide (Note: This is an
  - older resource, but still worth a look). Open Educational Resources (OER): Resource Roundup https://pitt.libguides.com/openeducation/biglist Another libguides from the University of Pittsburgh titled "OER Open Educational Resources: Big List of Resources"
  - https://www.eschoolnews.com/2018/09/06/how-to-find-curate-and-assess-oer/ How to Assess, Curate, and Assess OER (worth a read)
  - https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=7&cad=rja&uact=8&ved=2ahUKEwjd5v2i5KHjAhWMwFkKHZ00C5MQFjAGegQlCBAC&url=https%3A%2F%2Fwww.mass.edu%2Fbhe%2Flib%2Fdocuments%2FBHE%2F2018-05-01%2520Open%2520Educational%2520Resources%2520(OER).pptx&usg=AOvVaw11N6e9acD9QGL2uiTKpdAy A PowerPoint from Mass Dept of Ed on Curating OER
- <a href="https://openstax.org/details/books/introduction-sociology-2e">https://openstax.org/details/books/introduction-sociology-2e</a> Great Sociology
   Textbook for Introduction to Sociology.

- I am currently building an online mini-capstone class for my 8th graders, called QUEST. Heidi Hayes Jacobs has been a huge support in this creation. The course is aligned to her book Bold Moves for Schools. I am more than happy to share when it is finalized.
- I create worksheets and project outlines I'd be willing to share.
- I have information on SlideShare.net under my name.
- I'm still working on creating more content.
- Not right now, but I am willing to in the future.
- The OpenStax Introduction to Psychology textbook is on par with the intro book we used to use. However, the softbound printed version is in black and white, and all the colors in graphs come out the same shade of gray, so you have to consult the digital copy to make sense of them.

  http://cnx.org/content/col11629/1.5
- University library eTexts and Films on Demand
- We are piloting Illustrative Math in our middle school.
- We do not have any open resources at this time.

#### Other Ideas Concerning OER

Share any other ideas or needs around OER.

- Answer keys for students
- At institutions where librarians and instructional designers are staff (at-will employees) not faculty, it's unclear whether we have the right to make our materials open, or are they owned by the institution as a condition of our employment.
- Blackboard is not user friendly. I clearly need to take a course in its usage.
- Consider broadening the definition of OER to consider resources available through university and public libraries
- Faculty should be strongly cautioned about using any test bank questions, from OER or a textbook publisher, as all it takes is one student anywhere to post them online to compromise the integrity of the test.
- Great idea but I find it necessary for a robust online platform similar to MyLab to use for assessment. Blackboard is still kludgy for this.
- Guaranteeing that the materials are high quality and that they peer reviewed is essential.
- I see that many of the current OER quality are not as high as those provided by commercial publishers and many do not provide supplementary materials, like PowerPoints and test banks. I do like to use OER if the quality and supplementary materials are comparable to textbook from commercial publishers. Authors of commercial textbooks can earn extra money from copyright and sales of the

- textbooks. State of CT should fund comparable incentives to the creators of OER, so that the quality can be matched with the market.
- I support the availability of and access to learning materials for all students. My concern is that supplemental materials become the primary source in some classrooms and thus disrupting the scope and sequence of the learning continuum for a district.
- I think we need concrete examples of how people can/will use OER. Are schools going to award credits for courses taken through OER? Is there guidance for this?
- I'm excited about OER and very much interested in helping educators understand what it is, how to locate OER, how to curate OER, how to assess OER quality, and how to contribute/remix OER. Let me know if you'd like some help with this endeavor.
- It would be cool to have a way to network with semi-local or even nationally to help people share stuff.
- My concern is getting access to model test questions and discussion topics similar to that provided by commercial textbook publishers.
- My department demands to use only one way to teach and we must use the expensive book.
- OER is not appropriate for English instruction, which depends upon high-quality, copyrighted materials. Since content-creators deserve to be compensated for their work, copyright is essential. Supporting authors, editors and publishers requires purchasing their content from their publishers, so therefore OER is inappropriate for many humanities courses, most significantly literature courses. While it may be possible to conceive of a model that distributes high-quality texts to students in a way that likewise compensates content-creators, the current OER model does not support this.
- Professors and instructors working for the CSCU are talented. By encouraging
  collaboration between us to create introductory textbooks, you will help CSCU
  students to save millions of dollars every year. The only way to assure the creation
  of these introductory textbooks is to change the requirements for tenure. Make
  the creation of this OER more valuable than other peer reviewed publications.
- Students in literature courses need to buy some books! Two reasons: First, college educated people own books, and our students must begin to buy and keep books of value as they become college educated people. Second, OER concerns should play NO role in the selection of literature we teach. 2. Classes that are marked "OER" or "NoLo" in a college course schedule tend to fill before classes which are not. The result is that students who have trouble with time management or significant life challenges which cause them to register late all end up in a section together. So, the push for OER is accidentally grouping challenged students together, which is both discriminatory and

counterproductive for effective teaching and learning. 3. In some subjects, OER material are among the best materials. In other subjects, the best materials cost money. If we want to educate our students, we should encourage faculty members to select the best materials available, while keeping cost to students in mind, and we should not set up systems that favor OER classes and discourage a culture of investment in learning as well as the collection of materials which have continued value for the college educated person.

- The recently offered CTFL copyright Monday Mentor workshop was very helpful.
- These resources are not easily searched and are of mixed value due to content and age. Librarians can do a better job of curating resources.
- Would like to know how other districts locate, evaluate, and use OER.
- Would like to know how to access existing resources and more about guidelines for creating these resources.

# **Opportunities**

The current, broad practice of developing and sharing digital learning materials in Connecticut — reflected in the 2019 survey and across multiple stakeholder groups — points to several opportunities to expand and deepen the benefits of using OER. The recommendations below take into account the realistic challenges that many educators have expressed to help ensure the long-term sustainability and success of any efforts undertaken at the state, regional, or local level.

#### **Encourage Professional Development**

As with any new approach to teaching and learning, educators and leaders need training in and ongoing support on the many aspects of OER including copyright, authoring, collaborating, curating, searching, and standards alignment. Expanding access to professional development can include the following:

- Current Conferences: Educators in K 12, colleges, and universities should consider attending and sharing their best practices at events taking place locally and regionally. Examples include the Northeast OER Summit (neoer.umasscreate.net), the Connecticut State Colleges and Universities (CSCU) OER Summit (www.ct.edu/oer#summit), the Connecticut Education Network (CEN) Conference (www.CTEdunet.net), the National #GoOpen Summit, Educause events (www.Educause.org), and other conferences that support best practices in digital teaching and learning.
- Future Events: At the 2019 Northeast OER Summit that took place in Massachusetts this past May, the total number of sessions presented by Connecticut leaders would have provided enough content for a day-long conference. While OER remains collaborative across regions rather than segmented by geography, if funding and interest justified, our state could hold its own professional development events. At the K 12 level, districts alone or in partnership with each other can include OER sessions in their professional development days taking place throughout the year.
- Existing Resources: In the spirit of openness and accessibility, many free resources exist to help educators leverage OER. For example, Creative Commons (www.CreativeCommons.org) and Open Pedagogy (www.OpenPedagogy.org) provide self-paced and modular training on a wide variety of topics. Dozens of free courses, instructional videos, and other supports are available through state and national resources, and educators can start by visiting <a href="http://www.ct.edu">http://www.ct.edu</a>, <a href="http://www.ct.edu">www.GoOpen.ct</a>, or <a href="tech.ed.gov/open">tech.ed.gov/open</a>. Survey respondents offered their own recommendations of materials they create or use (see pages 21 24).

#### **Encourage Creation and Sharing of Open Resources**

Educators in Connecticut already create and share OER. The 2019 survey supports this fact, and the essential conditions for digital learning in our state — a robust research and education network (CEN), expanded school and college networks, 1:1 computer programs, adoption of cloud computing and learning management systems, and state digital learning standards (ISTE) — pave the way for students, educators, and institutions to benefit from OER.

Spanning the online tools that educators already use there exists a collective library of high-quality, standards-aligned learning materials that they are ready to share. Having a common index and repository (i.e., online storage) for these materials holds great promise for cost savings, collaboration, and improving practice. Many commercially available platforms to serve OER communities already exist, offering robust authoring, posting, search, and curation features aligned with national and state standards. Having a single source of OER materials in Connecticut should ease and spur OER creation and sharing. When compared with the collective cost of purchasing commercial materials or separately creating instructional resources tied to the same lessons and standards, acquiring and managing a statewide repository should reap enormous return on investment. Our state has enough engaged OER experts to ensure sound governance of a repository to account for the needs of multiple stakeholder groups over time.

#### **Fund OER Initiatives**

The cost savings that come out of using OER justify modest investments to support training and technology platforms, funding that could come from a variety of sources. Many philanthropic organizations have committed funding to other state and regional OER efforts and may find the promise of supporting Connecticut compelling. Connecticut can leverage federal funding that it receives through the Every Student Succeeds Act (ESSA) Title II, Part A (Support for Excellent Teaching and Leading) and Title IV, Part A (Effective Use of Technology); as well as the Carl D. Perkins Career and Technical Education program, already aligned strongly with the use of OER.

At the state level, the Connecticut General Assembly may expand its appropriations from the 2019 session to support the OER Coordinating Council grant program. Partnerships across state agencies and organizations that support teaching and learning may also help fund the professional development and technology needed to support OER use that directly benefits their constituents.

#### Foster the Growth of OER Practices

While professional development; a technology platform to author, share, and curate materials; and funding to support these efforts all remain key to maximizing the potential benefits of OER, its growth will most depend on a culture of openness and adoption of practices among leaders and educators.

Connecticut has already championed the use of OER through the Commission's unanimous vote to join the national network of 20 Go Open states. Sharing of best practices through that network and other professional groups such as the State Educational Technology Directors Association (SETDA) will continue to benefit our state. Within Connecticut, leadership groups such as the CSCU OER Advisory Council provide guidance and resources to support adoption of OER practices. The OER Coordinating Council has funding for OER creation and vetting within institutions of higher education.

Agencies and professional groups committed to learning in the 21st century can bolster these and other efforts by integrating OER best practices into policy, procurement, training, and even professional advancement guidelines.

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## **About the Commission**

The Connecticut Commission for Educational Technology was established in 2000 by Public Act 00-187 to serve as the State's principal educational technology policy advisor. This report supports efforts defined in Connecticut's five-year Educational Technology Goals and Plan, which specifically looks at ways of maximizing use of and efficiencies in the E-rate program. Appointed members of the Commission reflect a broad range of stakeholders who inform the State's technology plan and priorities. For more information about the Commission, the State Technology Goals and Plan, and other publications, visit www.CT.gov/CTEdTech.

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