Open Educational Resources (OER) Update

Robert Awkward, Ph.D., Assistant Commissioner for Academic Effectiveness
OER as an Equity Approach

- Open (5Rs) and day one access
- More attention to DEI and UDL (i.e., cultural relevancy)
- Affordability
- Increases the diversity of authors
- Increases the diversity of teaching & learning materials for faculty to utilize
- Actively engages students in the co-creation of knowledge (open pedagogy)
- Improves learning outcomes for students; especially minoritized students
2011
Open Education Initiative at UMass Amherst

2016
MA Go Open Project (TAACCCT)

Spring 2018
SAC Resolution in Support of OER
Creation of MA CC OER Hub:
https://www.oercommons.org/hubs/masscc

AY 2018-2019
Statewide OER Consortium Project funded by PIF: Baseline Survey and Statewide Faculty Professional Development

Established OER Working Group

Fall 2019
OER Working Group Final Report and Recommendations brought to and adopted by the BHE on October 22, 2019.
Established to convene, study, evaluate, and make recommendations to address:

- The growing legislative interest to identify lower cost educational resources for Massachusetts students
- The issue of equity of access and participation in higher education for under-served, low-income, and first-generation students; especially students of color
- Enhancing instructional effectiveness while lowering costs for students.
The Board of Higher Education:

- receives the final report and recommendations of the OER Working Group.
- thanks the members of the Working Group, the Co-Chairs, and Dr. Robert Awkward.
- directs the Commissioner to continue to work with key stakeholders to implement the short-term recommendations in the report.
- asks the Commissioner to conduct additional research, coordination, and due diligence on the mid-term and long-term recommendations in the report and to develop a plan of actional items for Board consideration.
- directs the Commissioner or his/her designee to report back to the board periodically on the Department’s progress in this regard.
Open Educational Resources (OER) are teaching, learning and research materials in any medium – digital or otherwise – that reside in the public domain or have been released under an open license that permits no-cost access, use, adaptation and redistribution by others with no or limited restrictions (UNESCO).
Status of the Final OER Report & Recommendations

Short-term
Adopt a statewide definition (Completed)
- Open Educational Resources are teaching, learning, and research materials in any medium – digital or otherwise – that reside in the public domain or have been released under an open license that permits no-cost access, use, adaptation and redistribution by others with no or limited restrictions.

Establish statewide coordination (Completed)
- The OER Advisory Council was launched comprised of representatives from all of the 29 public institutions
- Co-chairs: Millie Gonzalez, Dean of Library, Framingham State and Susan Tashjian, Instructional Designer, Northern Essex Community College
- The OER Advisory Council has six committees: Steering, Assessment, Marketing & Education, Professional Development, Course Flagging, and Repository Committees
- Dr. Robert Awkward, Assistant Commissioner for Academic Effectiveness serves as the statewide coordinator

Designate OER courses in course management systems (In-progress)

Enable, activate, and support student advocacy (Completed and ongoing)
- The Advisory Council has three student members including the Student Advisory Council (SAC) Chair
- We have identified OER Student Ambassadors on 15 campuses; the largest number ever!
Share and encourage faculty development best practices *(Ongoing)*

- Two OER Partners Training (Librarians, Instructional Designers & Teaching & Learning Center Staff) sessions held in June 2020
- Two OER Faculty Training sessions held in May 2020, May 2021, and Oct./Nov. 2022
- Must attend the training AND complete a written review of a digital textbook in OEN’s Open Library in order to receive a $200 stipend

Results to Date:
- 53.4% of attendees submitted reviews (May 2020)
- 54.9% of attendees submitted reviews (May 2021)
- 58.4% adopted OER in fall 2020 (May 2020)
- 60.9% adopted OER in fall 2021 (May 2021)
- 71.1% said the training influenced their decision to adopt (May 2020)
- 65.7% said the training influenced their decision to adopt (May 2021)
OER Final Report & Recommendations: Mid-Term

- Actively promote the use of OER in graduate and continuing education to meet employers’ workforce development needs (Limited action to date)
  - UMass Medical School is a member of the OER Advisory Council and is working to create a culture of OER

- Promote discoverability best practices and expand a unified repository to make the discovery of local content easier (Ongoing)

- OER Advisory Council adopted the Repository Committee Report on January 11, 2020:
  - Retain and enhance the current OER Commons Community College Hub
  - Recently renamed Open Massachusetts: A Public Higher Education Repository
  - Hired a Mass. OER Commons Coordinator (i.e., OER librarian, Creative Commons certified) – Rachel Oleaga
  - DHE continues to pay for OER Commons as the Community College Hub vendor
Course Marking was adopted by the Board of Higher Education in June 2021

Results to Date:

- Course marking was already/has been implemented at eleven community colleges and one UMass campus (12/28).
- Course marking to be implemented within the next two years at one community college, four state universities, and three UMass campuses (20/28).
- There remain three community colleges and five state universities who will need significant additional support.
“Course marking is the process of assigning specific, searchable attributes to courses” (Ainsworth, Allen, Dai, Elder, Finkbeiner, Freeman, Hare, Heige, Helregel, Hoover, Kirschner, Perrin, Ray, Raye, Reed, Schoppert, & Thompson, 2020).
OER Type Policies

- No Cost = OER/Library Resources/Free Resources
  - No textbook to purchase and no cost for students
  - To be so designated, a course/section should use OER as the primary, required instructional materials

- Low-cost ($50 or less)
A webinar was developed and provided for CAOs, Deans and Department chairs, IT, Registrars and OER representatives on February 2022 to:

- ensure everyone understood the June 30, 2021 deadline
- conduct a detailed review of the *Course Marking Implementation Guide*
- answer questions or concerns.

Subsequent SIS sessions were held for Banner, Jenzabar and Colleague institutions to encourage peer-to-peer learning.

Similar plans were developed and delivered in 2023 including three webinars based on the level of readiness, an Action Plan and a Survey Template:

- “Where to Begin” on Feb. 9, 2023
- “Getting Unstuck with Course Marking” on Feb. 23, 2023
- “Course Marking: Advocacy & Beyond” on Mar. 7, 2023
Established and approved OER Key Performance Indicators (KPIs) - November 2020; also adopted by the Board of Higher Education in June 2021:

- **Cost**
  - Total cost savings (KPI 1)

- **Outcomes**
  - Total no. of OER courses/sections as a percentage of total courses/sections (KPI 2)
  - No. of students enrolled in OER courses as a percentage of total enrollments (KPI 3)
  - Changes in DFW rates in OER vs. non-OER courses
  - Demographics of students taking OER courses vs. total students

- **Usage**
  - No. of faculty, staff, students participating in OER activities on campus (KPI 4)
Disclaimer

- This is the maiden voyage of this data collection.
- There will be noise within this data because it is the first time we have enacted performance measures.
- We have learned and developed new procedures as a result of this data collection, which we had not anticipated.
- This work will continue to get better each time we conduct this effort.
Overview

- 17 out of 28 undergraduate-serving institutions reported (61%)
  - 13 out of 15 community colleges
  - 4 out of 9 state universities
  - No UMass campuses

- Of the 17 institutions, nine (53%) have implemented course marking

- Of the remaining eight, three used Bookstore data.
KPI 1A/B: Total Cost Savings

- Total student costs saving = At least $7,621,994
  - Highest savings = $1,266,717
  - Average savings = $448,353
  - Lowest savings = $70,965

- Return on Investment (ROI)
  - $7,621,994/62,107 ($2,107: institutions + $60,000: DHE) = $123:1*

- Student cost savings per FTE for the 17 institutions
  - $7,621,994/46,459 (no. of FTE students) = $164.06

Notes:
*It is important to note that the $7.6 million in savings in FY22 includes spending prior to FY22. Thus, it is not exactly one-to-one. Also, the savings is cumulative and exponential over time.*
The KPI 1A/B: Total Cost Savings highlights the following takeaways:

- Over $120 savings generated for every public dollar spent.
- An increase in funding would generate exponential savings for students.
KPI 2: No Cost/Low Cost Utilization

- Overall percentage of No Cost = 10.5%
- Overall percentage of Low Cost = 5.0%
- Overall percentage of No/Low Cost = 15.5%

- Who were the institutions that performed higher than the average?
## KPI 2: No Cost/Low Cost Course Sections

<table>
<thead>
<tr>
<th>Institution Name</th>
<th>No Cost</th>
<th>Low Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mass. College of Liberal Arts</td>
<td>38.2%</td>
<td>12.8%</td>
</tr>
<tr>
<td>Greenfield Community College</td>
<td>18.2%</td>
<td>11.9%</td>
</tr>
<tr>
<td>Fitchburg State University</td>
<td>17.6%</td>
<td>18.3%</td>
</tr>
<tr>
<td>North Shore Community College*</td>
<td>15.3%</td>
<td></td>
</tr>
<tr>
<td>Massachusetts Community College*</td>
<td>14.7%</td>
<td></td>
</tr>
<tr>
<td>Salem State University</td>
<td>14.6%</td>
<td>12.8%</td>
</tr>
<tr>
<td>Westfield State University</td>
<td>14.3%</td>
<td>13.4%</td>
</tr>
<tr>
<td>Northern Essex Community College*</td>
<td>12.6%</td>
<td></td>
</tr>
<tr>
<td>Berkshire Community College*</td>
<td>11.9%</td>
<td>8.5%</td>
</tr>
<tr>
<td>Cape Cod Community College</td>
<td>7.7%</td>
<td></td>
</tr>
</tbody>
</table>
KPI 3: Student Enrollment in OER Course Sections

- Overall percentage of students in No Cost course sections = 11.5%
- Overall percentage of students in Low Cost course sections = 5.5%
- Overall percentage of students in No/Low Cost course sections = 17.0%
- Who were the institutions that performed higher than the average?
## KPI 3: Student Enrollment in OER Course Sections

<table>
<thead>
<tr>
<th>Institution Name</th>
<th>No Cost Participation %</th>
<th>Low Cost Participation %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mass. College of Liberal Arts</td>
<td>36.8%</td>
<td>14.0%</td>
</tr>
<tr>
<td>Massasoit Community College*</td>
<td>17.8%</td>
<td></td>
</tr>
<tr>
<td>Fitchburg State University</td>
<td>16.1%</td>
<td>19.6%</td>
</tr>
<tr>
<td>Salem State University</td>
<td>16.1%</td>
<td>12.3%</td>
</tr>
<tr>
<td>Northern Essex Community College*</td>
<td>15.2%</td>
<td></td>
</tr>
<tr>
<td>Westfield State University</td>
<td>15.0%</td>
<td></td>
</tr>
<tr>
<td>North Shore Community College*</td>
<td>14.9%</td>
<td></td>
</tr>
<tr>
<td>Greenfield Community College</td>
<td>14.9%</td>
<td>10.8%</td>
</tr>
<tr>
<td>Berkshire Community College*</td>
<td>14.8%</td>
<td>8.3%</td>
</tr>
<tr>
<td>Cape Cod Community College</td>
<td></td>
<td>7.7%</td>
</tr>
</tbody>
</table>

*Institutions that utilize course marking
**Takeaways**

- Campuses are utilizing more No Cost than Low Cost textbooks
- What can be learned from the performance of MCLA, Fitchburg State University, Salem State University, Greenfield Community College, and Berkshire Community College that excelled with No and Low Cost?

<table>
<thead>
<tr>
<th>Policies?</th>
<th>Leadership?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operational Practices?</td>
<td>Institutional investments?</td>
</tr>
<tr>
<td>Historical Precedents?</td>
<td>Data reporting capability?</td>
</tr>
<tr>
<td>Resources?</td>
<td>Data collection methods?</td>
</tr>
</tbody>
</table>
Takeaways

- What can be learned from the performance of Massasoit Community College, Northern Essex Community College, Westfield State University, North Shore Community College, and Cape Cod Community College that excelled with No or Low Cost, but not both?

- There are lots of opportunities to increase the utilization of OER and the concomitant student savings

- What can be done to improve their ability to increase utilization of both No Cost and Low Cost textbooks?
KPI 4: Faculty/Staff Participation in Professional Development

- Overall number of faculty/staff who participated in professional development = 644
- Average number of faculty/staff who participated in professional development = 36
- Who were the institutions that performed higher than the average?
KPI 4: Faculty/Staff Participation in Professional Development

<table>
<thead>
<tr>
<th>Institution/Number of Faculty/Staff</th>
<th>Institution/Number of Faculty/Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fitchburg State University/164</td>
<td>Berkshire Community College/47</td>
</tr>
<tr>
<td>Bridgewater State University/109</td>
<td>Bristol Community College/40</td>
</tr>
<tr>
<td>Roxbury Community College/50</td>
<td>Mass. Bay Community College/38</td>
</tr>
<tr>
<td>Springfield Technical Community College/50</td>
<td></td>
</tr>
</tbody>
</table>

Takeaway: Of the seven institutions, only two have high no/low cost utilization and one has course marking. So, professional development is useful for the individual, but does not necessarily build OER capacity. Of course, there has been professional development ongoing before this recent data collection. In addition, we know that training and critiquing an open textbook has created more OER utilization greater than the national average: Mass. = 61% vs. the national average = 45% (Sources DHE; OEN)
Lessons Learned from the First Year

What did we learn: challenges from the first data collection?

KPIs reported in AY2022:

- KPI 1A: Total Cost Savings
- KPI 1B: Institutional investments in Open Education
- KPI 2: Percentage of No/Low cost course sections
- KPI 3: Percentage of students in No/Low cost course sections
- KPI 4: Number of faculty/staff participating in professional development in OER training and education

<table>
<thead>
<tr>
<th>KPI-2 and KPI-3</th>
<th>Source: course markings, bookstore, else</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of students enrolled in no/lowl cost sections</td>
<td>Source: course markings, bookstore, else</td>
</tr>
<tr>
<td>Number of students enrolled in all sections</td>
<td>Source: SIS, <em>all</em> undergraduate credit enrollment; should be duplicated counts of students</td>
</tr>
<tr>
<td>Number of sections with low cost materials</td>
<td>Source: course markings, bookstore, else</td>
</tr>
<tr>
<td>Total number of sections offered</td>
<td>Source: SIS, all undergraduate credit course sections regardless of OER status</td>
</tr>
</tbody>
</table>
Lessons to be Applied Going Forward

How will we apply what we learned going forward?

- Updated guidance to clarify definitions
- Updated submission form
- Training and workshops prior to submission
- Include IR early on as we did previously
Closing