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Performance Incentive Fund (PIF) FY 2019 Year-end Report.doc

Marilyn S Billings

I. Contact and Program Information

- Name of Lead Institution: University of Massachusetts Amherst
  Key Contact/Grant Administrator: Marilyn S Billings, Head, Office of Scholarly
  Communication; phone: 413-545-6891, email: mbillings@library.umass.edu
- Project Focus: New Approaches to Affordability and Student Success
- Project Title: Massachusetts Open Education (MOE): Achieving Access for All
- Consortium grant partner institutions:
    - Holyoke Community College
    - Northern Essex Community College
    - Worcester State University

II. Abstract

The "Massachusetts Open Education (MOE): Achieving Access for All" consortium PIF grant's major goal was to advance the Commonwealth's "Big Three" goals (access & affordability, closing achievement gaps, and boosting graduation rates by attracting and graduating more students from underserved populations) by building capacity and launching an effective strategy for utilizing open educational resources (OER) in the 28 public undergraduate higher education institutions in Massachusetts. The principle objectives of the grant were 1) to assess the state of OER adoption by conducting a survey of these 28 institutions in collaboration with the DHE, 2) build capacity for OER by collaborating and building a community of practice through regional workshops, 3) create OER course materials for at least five high enrollment MA Transfer Block courses and accelerate the adoption of best practices in OER pedagogy through the creation of OER that adheres to learning principles and universal design for learning, 4) and develop a system to track OER usage along with course completion and retention with OER courses statewide. National studies have shown that students who have access to curriculum materials from day one of classes maintain a higher grade point average, are more likely to complete their course of study, and graduate with less debt load when the faculty use OER materials. The MOE team worked closely with the DHE and the statewide OER Working Group that the DHE established in late fall 2018 to accomplish these objectives.

III.   Project Implementation

The ambitious "Massachusetts Open Education (MOE): Achieving Access for All" project was successfully implemented by a core team of faculty, librarians, and instructional designers from the lead and partner institutions from November 2018 – September 2019. The principle objectives met by the grant were to assess the state of OER adoption in Massachusetts public undergraduate higher education; provide high quality professional development opportunities to support scaling of OER; develop OER course materials for high enrollment courses that are included in the Mass Transfer block; accelerate the adoption of best practices in teaching and learning through the creation of OER that adheres to learning science principles and universal design for learning; develop a system to track OER usage and data on course completion and retention with OER courses statewide; expand the use of OER to remove financial barriers for all students in Massachusetts; and build support for the creation of a state-wide OER initiative. Early research

conducted prior to this grant has shown that students in classes using OER perform the same or better as their peers using commercial textbooks. In addition, preliminary research at the national level shows students using OER have higher GPAs and better retention rates than students in non-OER courses. Using OER reduces costs significantly for students who, according to national statistics, spend an average of $1,200 a year or more on textbooks, thus making college more accessible and affordable for previously underserved populations.

The first major objective of this project was to assess the state of OER adoption in the 28 Massachusetts public undergraduate higher education (MPHE) institutions by conducting a survey to provide a baseline from which to measure future work and to assist the team in identifying the key areas that needed to be covered in the planned regional workshops. The MOE team built upon survey instruments previously developed by the MA #GoOpen project and similar projects done in other states to jumpstart the creation of the MOE OER survey. The survey was distributed by the DHE to the Chief Academic Officers of the MPHE institutions. We received a 100% response rate, critical for future strategic efforts by the team and the DHE.

The MOE team and DHE undertook a thorough assessment of the OER survey results to determine the respondents' requests for types of OER training they would find most useful.

These needs included:
- Finding OER,
- Strategies for increased OER adoption,
- Definition of OER and why faculty should consider them,
- Getting started with OER,
- Accessibility of course materials,
- Open pedagogy,
- Open licensing.

In addition, the survey identified deterrents to faculty OER adoption:
- not enough high-quality resources for my subject,
- no available ancillary resources,
- too hard to find materials,
- too difficult to change or edit.

These results mirrored those from Freeing the Textbook: Educational Resources in U.S. Higher Education (2018) from Babson Survey Research Group. After mapping the survey results and identifying the training needs, the team moved to the next phase of the grant - to organize and conduct regional OER trainings open to all stakeholders: faculty, staff, instructional designers, librarians, administrators, and students. Faculty attendees received a $200 stipend after attending the training and completing a review of an open textbook in the Open Textbook Library. This method had been identified by national studies as a key way to engage faculty with OER materials, who then go on to adopt an open textbook, furthering the impact of OER adoption. The PIF grant funded four regional workshops:
- Feb 01, 2019 at Northern Essex Community College.
- Feb 08, 2019 at University of Massachusetts Amherst.
- March 12, 2019 at Bridgewater State University.
- March 14, 2019 at Worcester State University.

The demand was so high that the DHE funded a fifth regional workshop:
- March 20, 2019 at Roxbury Community College.

The full day agenda included the following sessions: Getting Started with OER; Open Licensing / Creative Commons; Finding Free and Open Resources; Keeping Accessibility in Mind; Special Topics based on needs identified in the survey; Next Steps including an overview of the OER textbook review process for faculty. Integrated within the team's work was a continuous improvement iterative process to improve the workshops based on experience and attendee feedback.

While completing the regional workshops, the MOE team started to work on the third main focus area of the grant - to provide a professional development opportunity for faculty to create ancillary materials for courses that had been identified as high enrollment Mass Transfer Block general education courses, a Course Development Day. The "Call for Proposals for OER Developers" was sent to faculty attendees of the regional workshops asking them to focus on the high demand subject areas shown in the table below. It was marketed as their chance to work with other innovative faculty from across MPHE institutions in a team-based approach to develop ancillary materials (i.e., lecture slides, assessments, study guides, videos, test banks) for a specific group of high-enrollment courses included in the Mass Transfer block.

# CR	Subject Areas	Eligible GenEd Foundation Courses from MassTransfer Block for OER Development
9	**Behavioral and social sciences**	**Introduction to Psychology** **Introduction to Sociology** **Cultural Anthropology** **Macroeconomics** **Microeconomics** **U.S. History I**
9	**Humanities and fine arts**	**Public Speaking** **Interpersonal (Oral) Communications** **Ethics** **Philosophy**
7	**Natural or physical science**	**Intro to Biology I and II** **General Biology** **Anatomy and Physiology I and II** **Microbiology** **Chemistry I**
6	**English composition/writing**	**English Composition I** **English Composition II**
3	**Mathematics/quantitative reasoning**	**Statistics (Intro to Stats)** **College Algebra**

The Course Development Day was led by an outside facilitator from OpenStax who had experience with this type of work. The MOE team provided a brief recap of regional training session content, then faculty worked in disciplinary working groups with OER mentors from the MOE team and the MA OER Working Group. Faculty developed a work plan and then independently created

OER content. The OER mentors and members of the MOE team reviewed the faculty submissions using a pre-defined rubric and authorized final faculty payments of $1,000 each.

Most of the challenges that the MOE team encountered were with the structure of the Course Development Day and with some of the final faculty products. Anticipating that this work will continue under the direction of the DHE, the MOE team recommends that the faculty become engaged in more pre-work, that expectations of faculty and the quality of their outputs be made clearer, and that there be more project focus. The team also recommends that the next Course Development Day be focused on career programs materials.

IV.   Outcomes

Based on the principle objectives of the grant outlined in the proposal 1) to assess the state of OER adoption by conducting a survey of these 28 institutions in collaboration with the DHE, 2) build capacity for OER by collaborating and building a community of practice through regional workshops, 3) create OER course materials for at least five high enrollment MA Transfer Block courses and accelerate the adoption of best practices in OER pedagogy through the creation of OER that adheres to learning principles and universal design for learning, 4) and develop a system to track OER usage along with course completion and retention with OER courses statewide. Five regional OER workshops: These workshops addressed the need to build capacity within the state. There were 452 registrants: 27 administrators, 355 faculty, 46 staff, and 24 others. However, the actual attendance was lower with 306 attendees, an average of 61 per training. Eighty-four faculty completed the requirement to write an open textbook review and received the $200 stipend.

OER Course Development Day: The high enrollment GenEd Foundation Courses, a set 34 credits accepted at all MPHE institutions, were the focus of this segment of the grant since there are already high quality texts in most of these areas but there is huge demand for more ancillary materials. There were 84 faculty applicants of which 75 were chosen. Fifty-two faculty completed their work on time and received the $1000 stipend.

The projected cost savings to students is **$631,000** in the first academic year.

Faculty feedback was significant and the comments worth noting:
"Thank you for a stimulating, thought-provoking day" "very informative" "much to think about" in reference to the accessibility section of the workshop, "a great use of my time during spring break", "thank you all for the opportunity to participate … get my work out there and grow my existing OER … network".

Materials created by the MOE team, licensed with Creative Commons Attribution-4.0 International licenses, are posted at **https://bit.ly/2pw8y8x.** These materials include the proposal to DHE, survey instrument, slides showing survey results, agenda and slides for regional workshops and course development day, criteria for open education textbook review, and team presentations.

The MOE team submitted a proposal to Open Ed Conference 2019 to present on our statewide work. After going through a rigorous peer-review process, our proposal was accepted so on October 31, 2019, some members of the team gave a presentation summarizing the highlights of the grant at the national OpenEd Conference in Phoenix, AZ.

Members of the MOE team were active members of the MA OER Working Group that was established in fall 2018: 2 of them as the co-chairs, others as leads of subcommittees. The MOE team

work fed directly into that larger group's report and recommendations to the Board of Higher Education in fall 2019, continuing the statewide impact beyond the grant itself. The Working Group completed its work in fall 2019 but its work will continue with the MA OER Advisory Council.

V. Budget

Expense Category	PIF Grant Funds from DHE			In-kind/ Partner Commitments		
	PIF Funds Requested	PIF Funds Expended	Balance	In-kind	Expended	Balance
1) Salaries	**0**	**0**	**0**	**0**	**0**	**0**
Administrator	0	0	**0**	0		**0**
Instructor/Professional	0	0	**0**	0		**0**
Staff Support	0	0	**0**	0		**0**
2) Fringe Benefits*	0	0	**0**	0		**0**
3) Travel	4925	4925	**0**	0		**0**
4) Supplies & Materials	0	0	**0**	9959	9959	**0**
5) Subcontracts	10000	10000	**0**	35041	35041	**0**
6) Consultants	0	0	**0**	0		**0**
7) Food	2869	2869	**0**			
8) Other Costs	**101295**	**101295**	**0**	**0**	**0**	**0**
Workshops	16245	16245	**0**	0		**0**
Course Development Day	53500	53500	**0**	0		**0**
Memberships	31550	31550	**0**	0		**0**
9) Student Tuition & Fees	0	0	**0**	0		**0**
10) Equipment	0	0	**0**	0		**0**
11) Indirect Costs	30911	30911	**0**			
Totals	**150000**	**150000**	**0**	**45000**	**45000**	**0**

Provide an explanation for any balance or funds transferred to other spending categories. Make sure to note any previously approved budget adjustments. Any unspent funds will revert back to the Commonwealth through the Massachusetts Management Accounting and Reporting System (MMARS).

After the regional workshops' expenses and the Course Development Day expenses were allocated, there were sufficient funds remaining in the budget to request consolidation of these funds into one line item to allow the state to become members of the national Open Education Network (OTN). The OTN is a community that works together to make higher education more open through sharing expertise and programming. The community supports the Open Textbook Library, a comprehensive resource for openly licensed academic textbooks and ancillary materials all of which are free. Many

other states and large consortia are already members and this additional adjustment to our budget allows our state to become an active participant, providing additional support through trainings and professional development opportunities for faculty, librarians, instructional designers and staff.