PROVIDING HIGH-QUALITY, LOW-COST LEARNING MATERIALS AND RESOURCES TO MARYLAND STUDENTS

Final Report on Potential Collaborations Between

The University System of Maryland's
William E. Kirwan Center for Academic Innovation

and

The Maryland State Department of Education

As requested in SB424: The Textbook Affordability Act of 2017, SECTION 2

December 31, 2018

Purpose of this Final Report

Per the Textbook Cost Savings Act of 2017 (Senate Bill 424) and in accordance with Section 2–1246 of the State Government Article, this document provides a final report by the University System of Maryland's (USM) Kirwan Center for Academic Innovation on progress in collaborating with the Maryland State Department of Education (MSDE) to provide primary- and secondary-education students with high-quality, low-cost learning materials and resources, such as open educational resources (OER).

Background

Since passage of the Textbook Cost Savings Act of 2017, Dr. MJ Bishop, Director of the USM's William E. Kirwan Center for Academic Innovation (the Kirwan Center) and Mrs. Val Emrich, Director of Instructional Technology at MSDE, have met on multiple occasions to share OER initiatives underway in the PK-12 and higher education sectors and explore areas of synergy for potential collaboration.

MSDE has been actively supporting the adoption of OER since becoming a #GoOpen state in February 2016 under the U.S. DoEd project (http://archives.marylandpublicschools.org/press/02_26_2016.html). Since then, every district in Maryland has become involved and is actively engaged in the implementation of a statewide strategy, creation of communities of practice for sharing best approaches, and development of a statewide repository of openly licensed and fully accessible instructional materials. See Appendix A for more details.

The Maryland Open Source Textbook (M.O.S.T.) initiative began in August 2013 as a collaboration between the USM Student Council and the Kirwan Center to provide a state-wide opportunity for faculty to explore the promise of OERs to reduce students' cost of attendance while maintaining, or perhaps even improving, learning outcomes. Now, in partnership with MarylandOnline, Maryland Association of Community Colleges, and the Maryland Independent College and University Association, M.O.S.T. is a *state-wide* initiative aimed at increasing access, affordability, and achievement for Maryland higher education students OER. Between Spring 2014 and Fall 2018, the project has involved faculty at 24 institutions across the state, saving 39,000 students over $6.3M cumulatively in just 4 short years. See Appendix B for more information.

Areas of Collaboration

Like MSDE, with the passage of SB424 and the $100,000 state grant, the M.O.S.T. initiative has been exploring development of a sustainable business model to support OER adoptions across Maryland's public higher education institutions, formation of OER professional learning communities, and piloting an OER repository. The many opportunities for M.O.S.T. to learn from MSDE and for us to work together across these three broad categories of activity are obvious. We are currently collaborating in the following ways:

Share strategies for scaling and sustaining OER adoptions. While our contexts are not identical, there are things we can learn from each other around managing change with respect to OER. Mrs. Emrich is now a member of the M.O.S.T. advisory committee so that we can continue to share these experiences and "lessons learned."

Co-create online professional development modules and/or regional meetings for faculty. There are several, high-level concerns that faculty must consider when adopting OER: digital licensing, accessibility, quality of materials, and student privacy. A grant that M.O.S.T. received from the Hewlett Foundation is funding the development of several online professional development modules for educators. MSDE is collaborating with us on the development of those materials to assure they are also relevant to K-12 teachers.

Bridge MSDE and M.O.S.T. OER repositories. Like MSDE, M.O.S.T. has also contracted with OER Commons to support the development of a postsecondary repository for OER materials. As the M.O.S.T. repository is developed winter/spring 2019, we will work together to ensure that the MSDE and M.O.S.T. repositories can be bridged (or even shared) to allow a space for K-12 to postsecondary collaboration and to enhance pathways into college.

Creation of cross-over content. As the MSDE and M.O.S.T. repositories are populated, we will begin to see where there are gaps in the available materials, particularly in high-impact areas like S.T.E.M. MSDE and M.O.S.T. will work together to seek funding and develop OER content for higher-level secondary and dual enrollment courses, built out by discipline.

Teacher preparation programs. In 2019 we hope to begin working with our USM institutions that have teacher education programs on developing OER training for pre-service teachers and support for OER resources in their libraries.

Next Steps

Momentum across the state's K-12 and higher education institutions for OER adoption continues to build. MSDE has developed a statewide strategy that has actively engaged all of Maryland's school districts. On December 8, 2017, the Kirwan Center co-sponsored a state-wide OER Summit attended by more than 500 higher educators representing all of Maryland's 2-year and 4-year public institutions and most of the private institutions. Additionally, a call for letters of support in August 2018 for a M.O.S.T. proposal to the Federal Department of Education generated responses from all USM institutions, Morgan State University, St. Mary's University, all community colleges, and Johns Hopkins University.

But the savings realized to date are just a drop in the bucket when compared to the potential OERs have for reducing the cost of education. There is much work remaining to do to move from the pilot phase to a structured, large-scale implementation. In November 2018, we submitted a budget to the Governor's Office seeking additional funding to support several initiatives designed to scale OER adoption and amplify the impact of the M.O.S.T. initiative and to explore additional ways we can collaborate with MSDE to address educational affordability and benefit Maryland students for generations to come.
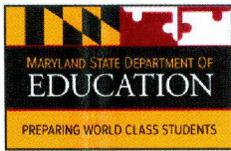
APPENDIX A: MSDE Open Educational Resource (OER) Work

On February 26, 2016, Maryland officially became a #GoOpen state. This initiative kicked off at the Luke Skywalker Ranch in California (Press Release). Representing the Maryland State Department of Education (MSDE), Val Emrich was asked to address the event attendees. As a #GoOpen state, Maryland agreed to do the following:

- *Adopt/Implement a statewide technology strategy that includes the use of openly licensed resources*
- *Develop and maintain a statewide repository*
- *Publish Open Educational Resources (OER) to the Learning Registry*
- *Participate in a community of practice*
- *Create a webpage to share the commitment to and progress for #GoOpen (Website)*

Howard County Public Schools became Maryland's first #GoOpen district. Later in 2016, Anne Arundel County Public Schools committed to the initiative. Both school systems are creating and curating resources to replace at least one textbook.

We anticipate that several more of our school systems will actively join the #GoOpen movement. The goal is to share what is being done statewide and nationally. Educators and students will be able to access a repository of relevant, current, interactive resources that support Universal Design for Learning and are available anytime and anywhere.

State Efforts related to Open Educational Resources (OER) in Maryland
Communities of Practice:

- Val Emrich co-leads the National Outreach and Support Community of Practice
- Erin Senior represents Maryland on the National Evaluation and Vetting Community of Practice

Statewide Repository:

- In 2016, MSDE signed an agreement with Amazon Inspire to populate their repository with vetted OER materials. This will serve as the statewide repository.
    - Various states will also be using this repository. Links to resources already created by other states or districts, such as OER courses, materials, and textbooks, will be included
    - Amazon Inspire will communicate with the Learning Registry
- 750 Maryland resources have been meta-tagged and submitted for uploading to the repository that went "live" during the fall of 2017. Thousands of Maryland resources will be uploaded by February 2018.

Adopt a statewide strategy:

- Through funding provided by the Statewide Longitudinal Data Systems (SLDS) Grant Program, MSDE was able to hire an educational specialist for two years to assist with OER efforts.
- A strategic planning team was created in June 2016 that consists of representatives from at least 12 Maryland school systems. This team has met six times since June 2016 and has continued their work through an eCommunity and Google documents. The team's areas of focus are listed below:
    - Marketing
    - Professional Development

- Evaluating and vetting – to include accessibility for individuals with disabilities, privacy considerations, meta tagging schema, copyright and attributions
  - The strategic planning team assisted MSDE's Office of Instructional Technology in planning seven 2-day regional Open Educational Resource workshops that were held throughout the summer. Statewide Longitudinal Data Systems (SLDS) Grant Program funds were used to support these workshops efforts.
  - The Office of Instructional Technology has spent the past year presenting or providing workshops at various conferences and/or meetings:
    - Congressional staffers meeting in DC
    - Common Ground, 2016 and 2017 (in 2017 provided differentiated sessions)
    - International Association for K-12 Online Learning (iNACOL) presentation with the Federal Department of Education and the Council of Chief State School Officers (CCSSO)
    - Mid-Atlantic Conference on Personalized Learning with CCSSO, 2016 and 2017
    - The Council of Educational Administrative and Supervisory Organizations of Maryland (CEASOM)
    - Maryland's Assistant Superintendents
    - School system presentations – Garrett Co., Anne Arundel Co.
    - Maryland Elementary school conferences
  - MSDE has been collaborating with the University System of Maryland to expand eTextbook efforts with Maryland's Institutions of Higher Education and Maryland's school systems.

Summer 2017: MSDE collaborated with statewide Assistant Superintendents to develop Open Educational Resource cohorts.
- Every Local Education Agency (LEA) and the Maryland School for the Deaf submitted names for the cohorts
- Seven regional 2-day workshops were held to include all LEA cohort members. These workshops were held across the state. The goals for the workshops were to:
  - Create solid collaborative teams from each LEA – several team building activities were provided
  - Develop a deep understanding of OER considerations around privacy, accessibility, copyright/licensing, and the evaluation of OERs – hands on activities were included
  - Provide time for LEA cohorts to begin formulating their plan for delivering customized PD (based on what was provided during the workshops) to all levels in their school system
  - Assist MSDE in adjusting MSDE's PD to meet cohort needs through participants' daily evaluations
- The Office of Instructional Technology reached out to University of Baltimore in order to collaborate on an OER marketing project. This project will be presented to us in January 2018.

Fall/Winter 2017:
- Seven 1-day regional workshops were held across the state. Goals for these workshops were to:
  - Allow cohorts to participate in meta-tagging activities
  - Provide access to Amazon Inspire and the 800 MSDE vetted OER resources, demonstrate how to create collections, and upload resources
  - Offer "deeper dives" into OER considerations such as:
    - Assigning Creative Common Licenses
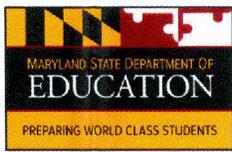
- Using a rubric to evaluate OERs
- Recognizing elements of websites that may not be accessible
- Testing and converting a Word document into an accessible format
- Learning the steps needed to create and include closed captioning
  - Provide time for LEAs to work on their PD plans – each LEA can request funding for their PD delivery or for resources needed to deliver this PD
    - PD plans and budget requests are due December 19, 2017
- Collaborate with statewide Assistant Superintendents to identify educators who are strong in instruction and technology to create new and interactive OERs – to be called "Inspired Designers"

Spring 2018:
- End of January severed ties with Amazon Inspire as our state repository – could not satisfy our requests
- Purchased HUB space on OER Commons to serve as the state repository
- Designed Maryland's HUB and participated in administrator training

Summer 2018:
- Two-day Conference for Eastern Shore LEAs was held– June 21-22
  - 91 attendees
  - Day 1 – Overview of OERs, the state involvement and sessions held for OER considerations – Copyright, Accessibility, Privacy, and Evaluation (C.A.P.E.)
  - Day 2 – District specific OER planning for marketing and PD
- Held C.A.P.E. Lunch and Learn workshops for MSDE content specialists
- Four content driven three-day workshops for 62 Inspired Designers
  - Educators were recommended by their district to participate – ELA, Mathematics, Social Studies, Science, Gifted and Talented, Special Education, Library Media, Instructional Technology
  - Day 1 – Overview of OERS and sessions for OER considerations, C.A.P.E.
  - Day 2 and Day 3 – MSDE Content Specialists worked directly with educators to revise, cull, or create OER resources
    - Educators used the Authoring Tool in OER Commons to submit their work
  - Each educator was provided an additional 30 hours to submit work

Fall 2018
- Submitted 209 vetted resources to OER Commons to be uploaded
- Marketing of Maryland's repository throughout the state
- MSDE is represented on the Maryland Open Source Textbook Initiative Advisory Committee (M.O.S.T.)
- Conduct a virtual meeting for cohort members to check status of PD in their districts and discuss next steps
- Planning has begun with Anne Arundel County Schools to support a 2019 summer leadership OER summit

APPENDIX B: Maryland Open Source Textbook (MOST) Initiative - Fall 2018 Update

Replacing costly textbooks with open educational resources (OER) shows promise to reduce students' cost of college attendance significantly while maintaining, or perhaps even improving, learning outcomes. The Maryland Open Source Textbook (M.O.S.T) initiative began in 2013 to support faculty across Maryland public higher education institutions in adopting freely available, openly licensed instructional materials for their courses. Led by the University System of Maryland's Kirwan Center for Academic Innovation in partnership with MarylandOnline, Maryland Association of Community Colleges, and the Maryland Independent College and University Association, M.O.S.T. is a *state-wide* initiative aimed at increasing access, affordability, and achievement for Maryland higher education students through open educational resources (OER).

From Spring 2014 – Fall 2018, 113 courses at 24 institutions across Maryland switched to OER, saving 39,000 students $154 per course on average or approximately $6.3 million cumulatively. In addition to those direct benefits, indirect benefits of OER adoption have included:

- **Student Access:** Ensuring all students have full access to all learning materials from day 1 of class to help them be prepared and successful.
- **Faculty Control of Learning Materials:** Giving faculty full control over the amount, order, and content of learning materials.
- **Faculty Collaboration:** Collaboration with like-minded faculty also working with OER.

Over half of faculty have reported that they have spent, on average, about the same amount of time preparing to teach their course and another 45% reported that they have spent more time, but once that work was done, faculty were generally positive about their experiences working with the open materials, with 92% of faculty somewhat to very likely to use OER materials in future courses. Findings from the M.O.S.T. data collected indicated that students:

- **Saved a significant amount of money**: Sixty-one percent of students surveyed typically spend between $200-$500 each semester on books and 9% of students spent over $500 each semester. Sixty-seven percent of students in the M.O.S.T. initiative did not spend any money for resources for their course, and an additional 19% spent less than $40 for materials.
- **Were more likely to use the resources**: Fifty-six percent of students surveyed used traditional textbooks 2-3 times per month or less. Sixty-two percent of students in the M.O.S.T. initiative used their materials 2-3 times per <u>week</u> or more often.
- **Found the OER to be the same or better quality than traditional resources**: Sixty-three percent of students surveyed said quality was about the same and 32% of students surveyed said it was better.
- **Are likely to enroll in other courses using OER:** Eighty-five percent of students surveyed said they were likely to enroll in another course that uses OER.
- **Prefer a course with OER over a course using traditional textbooks**: Given the choice between a course that uses OER and one that uses traditional textbooks, where all other variables are the same, 66% of students surveyed would prefer the course with OER.